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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2209	14785	27359	1.46	1.0E-19	H30795.1	EST_HUMAN	y079g07.r1 Soares adult brain N2b-4IB55Y Homo sapiens cDNA clone IMAGE:184188 5' similar to contains MER10 repetitive element;
2743	15298		2.16	1.0E-19	D38044.1	NT	Human gene for A1-receptor, exon 7-8
2873	15491		5.99	1.0E-19	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
3448	16055	28531	1.37	1.0E-19	AA834867.1	EST_HUMAN	af48b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1383631 3' similar to contains MER37.12
5322	17884		2.47	1.0E-19	AW117377.1	EST_HUMAN	af48b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1383631 3' similar to contains MER37.12
6225	18834	31607	3.54	1.0E-19	U12186.1	NT	Human gene for A1-receptor, exon 7-8
6358	25115		0.74	1.0E-19	AA555627.1	EST_HUMAN	af48b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1383631 3' similar to contains MER37.12
7624	20137	33015	0.86	1.0E-19	U08813.1	NT	Human gene for A1-receptor, exon 7-8
7624	20137	33018	0.86	1.0E-19	U08813.1	NT	Human gene for A1-receptor, exon 7-8
8387	20927	33847	1.79	1.0E-19	M84657.1	NT	Human gene for A1-receptor, exon 7-8
8676	21215		2.48	1.0E-19	T98920.1	EST_HUMAN	af48b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1383631 3' similar to contains MER37.12
10090	22585	35578	25.84	1.0E-19	AW812259.1	EST_HUMAN	af48b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1383631 3' similar to contains MER37.12
10089	22594	35587	1.89	1.0E-19	N44631.1	EST_HUMAN	af48b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1383631 3' similar to contains MER37.12
11353	23907		2.24	1.0E-19	AW023137.1	EST_HUMAN	af48b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1383631 3' similar to contains MER37.12
11594	24037	37108	1.64	1.0E-19	U93163.1	NT	Human gene for A1-receptor, exon 7-8
6754	18347	32155	2.39	8.0E-20	7657286	NT	Human gene for A1-receptor, exon 7-8
6754	18347	32158	2.39	8.0E-20	7657286	NT	Human gene for A1-receptor, exon 7-8
7527	20047	32817	1.4	8.0E-20	A1221371.1	EST_HUMAN	af48b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1383631 3' similar to contains MER37.12
7527	20047	32818	1.4	8.0E-20	A1221371.1	EST_HUMAN	af48b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1383631 3' similar to contains MER37.12
3314	15824	28402	0.78	7.0E-20	BF328455.1	EST_HUMAN	af48b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1383631 3' similar to contains MER37.12
7068	18087	30443	5.61	7.0E-20	AL138120.1	EST_HUMAN	af48b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1383631 3' similar to contains MER37.12
8433	20973	33887	9.45	7.0E-20	AA557657.1	EST_HUMAN	af48b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1383631 3' similar to contains MER37.12
8433	20973	33888	9.45	7.0E-20	AA557657.1	EST_HUMAN	af48b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1383631 3' similar to contains MER37.12
11561	24008		9.21	7.0E-20	6912633	NT	Human gene for A1-receptor, exon 7-8
3611	16214	28694	4.64	6.0E-20	P39188	SWISSPROT	af48b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1383631 3' similar to contains MER37.12
4359	16946	29388	4	8.0E-20	BE82434.1	EST_HUMAN	af48b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1383631 3' similar to contains MER37.12

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4700	17282		1.11	5.0E-20	AV725123.1	EST_HUMAN	AV725123 HTC Homo sapiens cDNA clone HTC8TA01 5'
7169	19701	32548	1.33	5.0E-20	AF075301.1	EST_HUMAN	AF075301 Human fetal liver cDNA library Homo sapiens cDNA clone HA0250
7866	20428	33338	4.79	5.0E-20	W60525.1	EST_HUMAN	zh78d03.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418191 3' similar to contains MER30.11 MER30 repetitive element;
7866	20428	33337	4.79	5.0E-20	W60525.1	EST_HUMAN	zh78d03.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418191 3' similar to contains MER30.11 MER30 repetitive element;
8047	20589	33498	0.79	5.0E-20	BE185980.1	EST_HUMAN	MIR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
8769	21308	34231	1.53	5.0E-20	AB028174.1	NT	Mus musculus IMAN-g mRNA, complete cds
8769	21308	34232	1.53	5.0E-20	AB028174.1	NT	Mus musculus IMAN-g mRNA, complete cds
9366	20305		1.08	5.0E-20	O60809	SWISSPROT	HYPOTHETICAL PROTEIN DJ845024.1
9830	18454		0.92	4.0E-20	O60880	SWISSPROT	HISTONE H2B C (H2B/C)
7866	20408		5.58	4.0E-20	AB174352.1	EST_HUMAN	z64g03.x1 NCI_CGAP_OX35 Homo sapiens cDNA clone IMAGE:2283386 3'
10363	22887	35882	1.36	4.0E-20	AW037489.1	EST_HUMAN	QV3-DT0043-080200-080-c04 DT0043 Homo sapiens cDNA
2184	14780	27330	1.11	3.0E-20	U03988.1	NT	Human BXP21 gene
4288	16874	29323	1.49	3.0E-20	P23273	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN I14
4408	16883	29438	0.67	3.0E-20	AF230378.1	NT	Meriones ungulatus prestin (Pres) mRNA, complete cds
4731	17312	29755	0.83	3.0E-20	AA037616.1	EST_HUMAN	z636b12.s1 Soares_pregnant_uterus_NIHPU Homo sapiens cDNA clone IMAGE:484885 3' similar to contains L1.13 L1 repetitive element;
8865	21404		2.94	3.0E-20	D14547.1	NT	Human DNA, SINE repetitive element
10223	22718	35708	0.82	3.0E-20	BF185284.1	EST_HUMAN	601843561F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:408433 5'
10543	23080		1.84	3.0E-20	P11369	SWISSPROT	RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
11387	23839	36802	2.42	3.0E-20	AF284244.1	EST_HUMAN	q70d02.x1 NCI_CGAP_Ki63 Homo sapiens cDNA clone IMAGE:1894803 3' similar to contains Alu repetitive element;
11387	23839	36803	2.42	3.0E-20	AF284244.1	EST_HUMAN	q70d02.x1 NCI_CGAP_Ki63 Homo sapiens cDNA clone IMAGE:1894803 3' similar to contains Alu repetitive element;
11839	24202	31039	17.42	3.0E-20	BE688422.1	EST_HUMAN	601514180F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3915622 5'
863	13478		23.08	2.0E-20	AW303868.1	EST_HUMAN	xz24e10.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2761088 3' similar to SW:RS5_MOUSE P87481 40S RIBOSOMAL PROTEIN S5 ;
1160	13753	26262	2.92	2.0E-20	AA516335.1	EST_HUMAN	ng68h09.s1 NCI_CGAP_Lip2 Homo sapiens cDNA clone IMAGE:840087 similar to TR:G1224068
1150	13753	26263	2.92	2.0E-20	AA516335.1	EST_HUMAN	ng68h09.s1 NCI_CGAP_Lip2 Homo sapiens cDNA clone IMAGE:840087 similar to TR:G1224068

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2843	13476		16.26	2.0E-20	AW303868.1	EST_HUMAN	x24e10.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2761068 3' similar to SW:RS5_MOUSE
5081	17854	30094	4.35	2.0E-20	Q28083	SWISSPROT	P97461 40S RIBOSOMAL PROTEIN S5.;
5081	17854	30095	4.35	2.0E-20	Q28083	SWISSPROT	ZONADHESIN PRECURSOR
5328	17889		1.43	2.0E-20	5174538	NT	ZONADHESIN PRECURSOR
8061	20803	33514	0.97	2.0E-20	AA309457.1	EST_HUMAN	Homo sapiens maleate dehydrogenase 1, NAD (soluble) (MDH1) mRNA
9118	21854	34596	5.33	2.0E-20	D10083.1	NT	EST180328 Liver III Homo sapiens cDNA 5' end
9118	21854	34596	5.33	2.0E-20	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
							Homo sapiens RGH1 gene, retrovirus-like element
11622	24084	37128	1.76	2.0E-20	AA768755.1	EST_HUMAN	os35b08.s1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1306635 3' similar to contains MER4.b2
							MER4 repetitive element;
11622	24084	37128	1.76	2.0E-20	AA768755.1	EST_HUMAN	os35b08.s1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1306635 3' similar to contains MER4.b2
12236	24809	30789	2.84	2.0E-20	H5371.1	EST_HUMAN	MER4 repetitive element;
							CHR220310 Chromosome 22 exon Homo sapiens cDNA clone C22_391_5'
2058	15396	27211	3.02	1.0E-20	AA281961.1	EST_HUMAN	z11408.r1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:712811 5' similar to contains MER19.12
							MER19 repetitive element;
4533	17117	29563	1.18	1.0E-20	BF115156.1	EST_HUMAN	hfr94b06.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3135155 3' similar to contains L1.12 L1
6975	19551	32378	0.72	1.0E-20	AF049587.1	EST_HUMAN	repetitive element;
8090	21826	34562	2.48	1.0E-20	11418491	NT	AF049587 Human activated dendritic cell mRNA Homo sapiens cDNA clone GA05
							Homo sapiens Autosomal Highly Conserved Protein (AHCPL), mRNA
11427	23876	36943	3.02	1.0E-20	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11966	24286		6.39	1.0E-20	AA420453.1	EST_HUMAN	nc80g08.r1 NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE:745694 similar to contains L1.13 L1
11681	24098		3.9	9.0E-21	AW888188.1	EST_HUMAN	repetitive element;
							RC3-NN0068-090500-021-b03 NN0068 Homo sapiens cDNA
8746	21285		1.77	8.0E-21	AW674891.1	EST_HUMAN	bb30a02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2884714 5' similar to SW:NIAM_HUMAN
11413	23884	36925	4.8	8.0E-21	AA909411.1	EST_HUMAN	O95168 NADH-UBIQUINONE OXIDOREDUCTASE ASH1 SUBUNIT PRECURSOR;
11652	24212		5.02	8.0E-21	O213300	SWISSPROT	cb71606.s1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1336835 3'
2113	14891	27258	1.61	7.0E-21	P15900	SWISSPROT	ATP SYNTHASE A CHAIN (PROTEIN 6)
2113	14891	27259	1.61	7.0E-21	P15900	SWISSPROT	LAMININ BETA-2 CHAIN PRECURSOR (S-LAMININ) (LAMININ CHAIN B3)
3764	16365	28632	0.59	7.0E-21	AL163300.2	NT	LAMININ BETA-2 CHAIN PRECURSOR (S-LAMININ) (LAMININ CHAIN B3)
4341	16928		4.31	7.0E-21	AA046502.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21G100
							z167a08.r1 Soares_pregnant uterus Nbr4PU Homo sapiens cDNA clone IMAGE:487858 5'
6564	19162	31960	0.79	7.0E-21	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018

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8327	20868	33781	1.47	7.0E-21	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5'(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5
8610	21149	34084	10.47	7.0E-21	D14718.1	NT	Human chromosomal protein HMGT related gene
10022	22517	35512	0.73	7.0E-21	AW856822.1	EST_HUMAN	RCO-CT0301-271199-031-F03 CT0301 Homo sapiens cDNA
10575	23110	36123	3.18	7.0E-21	AA723404.1	EST_HUMAN	zq73d03.s1 Scores_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:368981 3' similar to gb:M14338 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN);contains THR.S OFR repetitive element ;
11147	23655	36897	1.94	7.0E-21	7706868	NT	Homo sapiens PTD013 protein (PTD013), mRNA
4179	18770	29219	0.89	6.0E-21	BE408611.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
9083	21600		0.58	6.0E-21	BE162737.1	EST_HUMAN	PM1-1T0454-080100-002-H09 HT0454 Homo sapiens cDNA
960	13571	26087	0.82	5.0E-21	5902031	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type 21 (PTPN21), mRNA
4453	17039	29482	3.12	5.0E-21	BE968839.1	EST_HUMAN	601040871F1 NIH_MGC_74 Homo sapiens cDNA clone IMAGE:3633880 5'
4822	17497	29948	5.67	5.0E-21	4885474	NT	Homo sapiens melanoma antigen, family C, 1 (MAGEC1), mRNA
6860	19594		0.83	5.0E-21	AW440864.1	EST_HUMAN	he05e10.x1 NCI_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2818154 3'
7086	19857	32498	1	5.0E-21	BE856505.1	EST_HUMAN	783d11.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:3303573 3' similar to contains OFR.11 OFR repetitive element ;
10466	22680	35970	0.79	5.0E-21	Q91690	SWISSPROT	ZINC FINGER PROTEIN GLI1 (GLI-1)
10469	22680	35971	0.79	5.0E-21	Q91690	SWISSPROT	ZINC FINGER PROTEIN GLI1 (GLI-1)
11760	24157		1.49	5.0E-21	AA393574.1	EST_HUMAN	272c04.t1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:727878 5'
1769	14359	26904	1.24	4.0E-21	AA970713.1	EST_HUMAN	cc88e08.s1 NCI_CGAP_K045 Homo sapiens cDNA clone IMAGE:1573094 3' similar to TR-Q16530 Q16530 PMS3 MRNA ;contains OFR.11 OFR repetitive element ;
6853	19530	32355	3.04	4.0E-21	AB019576.1	NT	Rattus norvegicus mRNA for RTM, complete cds
8695	22194	35167	0.61	4.0E-21	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, Rofet gene, and sodium phosphate transporter (NP13) gene, complete cds
1877	14463	27020	5.92	3.0E-21	AA218891.1	EST_HUMAN	zq15d03.s1 Stratagene fetal retina B37202 Homo sapiens cDNA clone IMAGE:628771 3'
2313	14885	27480	1.2	3.0E-21	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
3116	15730	28200	3.35	3.0E-21	AJ007973.1	NT	Homo sapiens LGM228 gene
5691	18317	30818	0.97	3.0E-21	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5'(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5
5691	18317	30817	0.97	3.0E-21	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5'(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5
5913	18535		0.75	3.0E-21	AV681044.1	EST_HUMAN	AV681044 GLC Homo sapiens cDNA clone GLCGO10 3'
6326	18832		60.27	3.0E-21	BF184739.1	EST_HUMAN	601844465F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4084945 5'

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7129	19489	32287	7.35	3.0E-21	BF361063.1	EST_HUMAN	RC1-OT0083-100800-019-g08 OT0083 Homo sapiens cDNA
9609	22109	35071	0.98	3.0E-21	AW897760.1	EST_HUMAN	OM1-NN0063-280400-203-h08 NN0063 Homo sapiens cDNA
12359	25013	30617	2.75	3.0E-21	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
167	12820		18.17	2.0E-21	BE163247.1	EST_HUMAN	QV3-HT0458-170200-060-g12 HT0458 Homo sapiens cDNA
970	13581	28063	0.71	2.0E-21	AB007857.2	NT	Homo sapiens mRNA for KIAA0397 protein, partial cds
970	13581	28084	0.71	2.0E-21	AB007857.2	NT	Homo sapiens mRNA for KIAA0397 protein, partial cds
1258	13853		2	2.0E-21	BE084410.1	EST_HUMAN	RC4-BT0311-141188-011-h08 BT0311 Homo sapiens cDNA
2665	15223	27785	2.45	2.0E-21	Q28963	SWISSPROT	ZONADHESIN PRECURSOR
2665	15223	27786	2.45	2.0E-21	Q28963	SWISSPROT	ZONADHESIN PRECURSOR
5675	18302	30784	1.81	2.0E-21	A1824582.1	EST_HUMAN	ts30R03.x1 NCI_CGAP_P1n1 Homo sapiens cDNA clone IMAGE:2230109 3' similar to TR:Q68854 Q68854
5765	18391	31103	0.91	2.0E-21	AA027211.1	EST_HUMAN	HYPOTHETICAL 51.1 KD PROTEIN;
5765	18391	31104	0.91	2.0E-21	AA027211.1	EST_HUMAN	z897a12.1 Scores_fetal_heart_Nb-H19W Homo sapiens cDNA clone IMAGE:368910 5'
8304	20845	33768	5.08	2.0E-21	BE141785.1	EST_HUMAN	z897a12.1 Scores_fetal_heart_Nb-H19W Homo sapiens cDNA clone IMAGE:368910 5'
8757	21296	34216	3.84	2.0E-21	AU136779.1	EST_HUMAN	QV0-HT0103-091188-050-g11 HT0103 Homo sapiens cDNA
10637	23454		2.2	2.0E-21	BE360127.1	EST_HUMAN	AU136779 PLACE1 Homo sapiens cDNA clone PLACE1005052 5'
11189	23704	36754	2.24	2.0E-21	BE973829.1	EST_HUMAN	h09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3148256 3' similar to contains MER29.b3
11189	23704	36755	2.24	2.0E-21	BE973829.1	EST_HUMAN	MER29 repetitive element;
12072	24351		10.78	2.0E-21	AF176816.1	NT	601680636F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3951008 5'
1298	13882	28415	1.54	1.0E-21	AA557657.1	EST_HUMAN	601680636F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3951008 5'
1448	14040		3.58	1.0E-21	A1801284.1	EST_HUMAN	Homo sapiens putative 8-hydroxyguanine DNA glycosylase gene, complete cds
5397	17955	30368	14.37	1.0E-21	P08548	SWISSPROT	r148-04.s1 NCI_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043718 similar to contains MER29.b2
6613	18210		2.59	1.0E-21	AL079752.1	EST_HUMAN	MER29 repetitive element;
7243	19772	32629	4.68	1.0E-21	A1228104.1	EST_HUMAN	ar88d12.x1 Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2152343 3'
10477	22971		1.45	1.0E-21	5730038	NT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
12485	24616		2.48	1.0E-21	AF046133.1	NT	DKFZp4340830_r1 434 (synonym: hbs3) Homo sapiens cDNA clone DKFZp4340830 5'
4500	17084	28534	2.78	8.0E-22	A1702438.1	EST_HUMAN	qg47e05.x1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:1838338 3' similar to gbtM64241 OM
8540	21078	33988	1.2	8.0E-22	AL163201.2	NT	PROTEIN (HUMAN);
8540	21078	33989	1.2	8.0E-22	AL163201.2	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
10670	23202	36215	5.08	9.0E-22	AV761874.1	EST_HUMAN	Homo sapiens chromosome Xp22 410-8
							ts94a03.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2298204 3' similar to TR:Q15408 Q15408
							NEUTRAL PROTEASE LARGE SUBUNIT;
							Homo sapiens chromosome 21 segment HS21C001
							Homo sapiens chromosome 21 segment HS21C001
							AV761874 MDS Homo sapiens cDNA clone MDSOCC05 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11553	24001	37073	3.44	9.0E-22	AL140358.1	EST_HUMAN	AL140358 PLACE2 Homo sapiens cDNA clone IMAGE:2003394 5'
884	13598		4.19	8.0E-22	BE144748.1	EST_HUMAN	CMO-HT0179-281089-076-H05 HT0179 Homo sapiens cDNA
7837	20379		3.28	8.0E-22	AA046502.1	EST_HUMAN	Z67A06.L1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:487858 5'
693	13318	25801	5.27	7.0E-22	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
4370	16957	28389	2.55	7.0E-22	Q61838	SWISSPROT	ALPHA-2-MACROGLOBULIN PRECURSOR (ALPHA2M)
5180	17755	30184	1.12	7.0E-22	AB008681.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
8824	21163		1.89	7.0E-22	AF151054.1	NT	Homo sapiens HSPC220 mRNA, complete cds
8766	21305	34227	3.39	7.0E-22	M78590.1	EST_HUMAN	EST00738 Fetal brain, Strategene (cat#8363208) Homo sapiens cDNA clone HFBCF07
8520	22020	34977	1.83	7.0E-22	AF009880.1	NT	Homo sapiens T cell receptor beta locus, TCRBV/TS3A2 to TCRBV1252 region
8184	20725		2.67	6.0E-22	AW028123.1	EST_HUMAN	wc05g07.x1 NC1_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2642812 3'
6840	19238	32038	2.82	5.0E-22	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
10221	22718	35707	7.63	5.0E-22	U60822.1	NT	Human dystrophin (DMD) gene, exons 7, 8 and 9, and partial cds
12314	24508		2.82	5.0E-22	BF476511.1	EST_HUMAN	neaz7b08.x1 NC1_CGAP_P28 Homo sapiens cDNA clone IMAGE:3255898 3' similar to contains Alu repetitive element;
3698	16289		0.83	4.0E-22	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region, segment 12
8049	20591	33498	0.53	4.0E-22	AV703223.1	EST_HUMAN	AV703223 ADB Homo sapiens cDNA clone ADRAUE12 5'
8352	25122		3.36	4.0E-22	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C082
10601	23135	36149	2.85	4.0E-22	BF218030.1	EST_HUMAN	601882813F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4085434 5'
12482	24621		3.39	4.0E-22	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C008
894	13608		0.89	3.0E-22	AA68678.1	EST_HUMAN	tm14h10.x1 NC1_CGAP_Co14 Homo sapiens cDNA clone IMAGE:2156811 3' similar to gb:U19583 HIGH AFFINITY INTERLEUKIN-8 RECEPTOR B (HUMAN); contains L1.t1 L1 repetitive element;
3735	16336		1.44	3.0E-22	D14718.1	NT	Human chromosomal protein HMG1 related gene
4821	17488	28947	3.04	3.0E-22	AB00125.1	EST_HUMAN	qb28c07.x1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:1697580 3' similar to contains MER12.12 MER12 repetitive element;
8172	20713		1.07	3.0E-22	BE150613.1	EST_HUMAN	QV0-HT0368-080200-088-f12 HT0368 Homo sapiens cDNA
8177	20718	33833	2.55	3.0E-22	BE08841.1	EST_HUMAN	RC05-BT0707-150300-021-H10 BT0707 Homo sapiens cDNA
8301	20842	33782	1	3.0E-22	X60680.1	NT	Rattus RY2G5 mRNA for a potential ligand-binding protein
8301	20842	33783	1	3.0E-22	X60680.1	NT	Rattus RY2G5 mRNA for a potential ligand-binding protein
1896	14578		2.49	2.0E-22	N24942.1	EST_HUMAN	yc73cd05.s1 Soares_melanocyte_ZNblHM Homo sapiens cDNA clone IMAGE:287369 3'
2584	16128	27697	1.81	2.0E-22	P24916	SWISSPROT	IMMEDIATE EARLY GENE 13 PROTEIN PRECURSOR
3467	16074	28547	5.3	2.0E-22	8394043	NT	Homo sapiens protein kinase, AMP-activated, gamma 3 non-catalytic subunit (PRKAG3), mRNA
4310	16898	28340	1.35	2.0E-22	AW817794.1	EST_HUMAN	PM1-ST0262-281189-001-d12 ST0262 Homo sapiens cDNA
6015	24753	31372	1.95	2.0E-22	W39456.1	EST_HUMAN	zc20f01.r1 Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:322873 5' similar to gb:X72308 MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (HUMAN);

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6324	18330	31708	3.3	2.0E-22	BF092116.1	EST_HUMAN	RC0-TN0079-150900-025-h12 TN0079 Homo sapiens cDNA
							q76r09.x1 Soares_NHrIMPu_S1 Homo sapiens cDNA clone IMAGE:1878288 3' similar to contains
9619	22119	35082	1.59	2.0E-22	A1276522.1	EST_HUMAN	MER29.13 MER29 repetitive element;
9712	22210	35182	0.69	2.0E-22	AA715315.1	EST_HUMAN	tr04h11.s1 NCI_CGAP_P122 Homo sapiens cDNA clone IMAGE:1219269 3'
9712	22210	35183	0.69	2.0E-22	AA715315.1	EST_HUMAN	tr04h11.s1 NCI_CGAP_P122 Homo sapiens cDNA clone IMAGE:1219269 3'
11595	24038	37107	2.33	2.0E-22	AW418880.1	EST_HUMAN	ha24f04.x1 NCI_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2874655 3'
11644	24605	30888	2.57	2.0E-22	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
1821	14508	27063	1.59	1.0E-22	AW865517.1	EST_HUMAN	PM4-SN0020-010400-009-h02 SN0020 Homo sapiens cDNA
2620	15182	27748	1.88	1.0E-22	U50871.1	NT	Human familial Alzheimer's disease (STM2) gene, complete cds
3457	16094	28539	1.45	1.0E-22	D14547.1	NT	Human DNA, SINE repetitive element
7723	20231	33120	1.28	1.0E-22	BE094687.1	EST_HUMAN	MR0-BT0659-220200-002-h07 BT0659 Homo sapiens cDNA
10446	22940	35950	0.94	1.0E-22	A1365435.1	EST_HUMAN	qz08b07.x1 NCI_CGAP_GLL1 Homo sapiens cDNA clone IMAGE:2020981 3' similar to contains MER29 b2
10446	22940	35951	0.94	1.0E-22	A1365435.1	EST_HUMAN	MER29 repetitive element;
12540	24650		12.67	9.0E-23	AW802801.1	EST_HUMAN	qz08b07.x1 NCI_CGAP_GLL1 Homo sapiens cDNA clone IMAGE:2020981 3' similar to contains MER29 b2
3629	16232	28707	0.94	8.0E-23	AF198348.1	NT	MER29 repetitive element;
3352	15960		2.37	7.0E-23	AV847248.1	EST_HUMAN	qz08b07.x1 NCI_CGAP_GLL1 Homo sapiens cDNA clone IMAGE:2020981 3' similar to contains MER29 b2
10918	23437	36458	4.4	7.0E-23	5031952	NT	MER29 repetitive element;
3481	16087		1.63	6.0E-23	AF196333.1	NT	MER29 repetitive element;
4355	16942	28394	1.1	6.0E-23	AL163248.2	NT	IL2-UM0076-070400-061-F11 UM0076 Homo sapiens cDNA
11790	24173	31028	3.44	6.0E-23	AF224669.1	NT	Gallus gallus Dact2 protein (Dact2) mRNA, complete cds
11790	24173	31027	3.44	6.0E-23	AF224668.1	NT	AV847248 GLC Homo sapiens cDNA clone GLCAW007 3'
11960	24300	30685	4.29	6.0E-23	A1209130.1	EST_HUMAN	Homo sapiens Not56 (D. melanogaster)-like protein (NOT56L) mRNA
5635	18284	30736	5.78	5.0E-23	U82671.2	NT	Rattus norvegicus RIM1B (Rim1B) mRNA, complete cds
6368	24763	31770	3.06	5.0E-23	AF179818.1	NT	Homo sapiens chromosome 21 segment HS21C049
7463	24763	31770	3.02	5.0E-23	AF179818.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3
5375	17834	30348	0.92	3.0E-23	AW946839.1	EST_HUMAN	(UBE2D3) genes, complete cds
6569	19167	31963	1.01	3.0E-23	AL163227.2	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6589	19167	31984	1.01	3.0E-23	AL183227.2	NT	Homo sapiens chromosome 21 segment HS21C027
7780	20323	33228	4.27	3.0E-23	AA130185.1	EST_HUMAN	z35g08.r1 Scores_pregnant_uterus_NIHPU Homo sapiens cDNA clone IMAGE:503988 5' similar to contains MER29.12 MER29 repetitive element ;
9173	21750	34894	2.89	3.0E-23	Z70884.1	NT	Human endogenous retroviral element HC2
9173	21750	34895	2.89	3.0E-23	Z70884.1	NT	Human endogenous retroviral element HC2
10219	22714		1.23	3.0E-23	AW887827.1	EST_HUMAN	RC3-NN00386-270400-011-401 NN00680 Homo sapiens cDNA
10888	23503		1.54	3.0E-23	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
894	13317	25802	3.85	2.0E-23	AJ289880.1	NT	Homo sapiens KIAA0851 gene (partial), X13 gene and LZTFL1 gene
1182	15391		4.01	2.0E-23	M85270.1	NT	Human matrix Glu protein (MGP) gene, complete cds
2821	15373	27842	1.47	2.0E-23	P22105	SWISSPROT	TENASCIN-X PRECURSOR (TN-X) (HEXABRACHION-LIKE)
2821	15373	27843	1.47	2.0E-23	P22105	SWISSPROT	TENASCIN-X PRECURSOR (TN-X) (HEXABRACHION-LIKE)
3418	18028		1.38	2.0E-23	A1201458.1	EST_HUMAN	qs73f11.x1 NCI CGAP P28 Homo sapiens cDNA clone IMAGE:1943757 3' similar to TR-Q13537 Q13537 MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE. ;
3779	18379		3.83	2.0E-23	BE165880.1	EST_HUMAN	MIR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
4048	18845	28112	3.01	2.0E-23	H59831.1	EST_HUMAN	Y16a02.r1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205418 5'
4048	18845	28113	3.01	2.0E-23	H59831.1	EST_HUMAN	Y16a02.r1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205418 5'
7814	20357		4.59	2.0E-23	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
8777	21316	34238	1.05	2.0E-23	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
11772	24161		3.5	2.0E-23	M32858.1	NT	Human alcohol dehydrogenase gamma subunit (ADH3) gene, exon 1
12328	24512		4.44	2.0E-23	AF008680.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
12454	25017		1.35	2.0E-23	AU133931.1	EST_HUMAN	AU133931 OVARC1 Homo sapiens cDNA clone OVARC1000946 5'
4627	17210	28680	1.72	1.0E-23	AL163252.2	NT	Homo sapiens chromosome 21 segment HS21C052
4881	17458		5.35	1.0E-23	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
6821	19411		4.89	1.0E-23	BE378471.1	EST_HUMAN	601238-55F1 NIH MGC 44 Homo sapiens cDNA clone IMAGE:3608653 5'
8297	20838	33769	4.53	1.0E-23	AA448087.1	EST_HUMAN	z482608.r1 Scores_besides_NHT Homo sapiens cDNA clone IMAGE:782688 5' similar to contains PTR5.12 PTR5 repetitive element ;
578	13208		1.48	9.0E-24	AA683213.1	EST_HUMAN	ab75a08.s1 Striatogene fetal retina 937202 Homo sapiens cDNA clone IMAGE:852758 3' similar to TRE19822 E19822 CA PROTEIN. ;
4753	17334	28777	1.16	8.0E-24	P23289	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN I3
4753	17334	28778	1.16	8.0E-24	P23289	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN I3

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6578	19174	31973	1.08	8.0E-24	11422027	NT	Homo sapiens capping protein (actin filament) muscle Z-line, alpha 2 (CAPZA2), mRNA
3941	16539		1.23	7.0E-24	AW837854.1	EST_HUMAN	QV0-DT0047-170200-122-#08 DT0047 Homo sapiens cDNA
5345	17806		18.11	7.0E-24	AL039498.1	EST_HUMAN	DKFZp434A2311_1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434A2311 5'
10519	23057		2.8	7.0E-24	AW303317.1	EST_HUMAN	xx1703.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813405 3' similar to contains Alu repetitive element; contains MER19.12 MER19 repetitive element ;
735	13355		2.28	6.0E-24	AB001421.1	NT	Macaca fuscata mRNA for Testis-Specific Protein Y (TSPY), complete cds
871	13486	26001	12.95	6.0E-24	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C048
4042	16840	29107	9.12	5.0E-24	AJ229043.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3
7735	20243	33134	0.9	5.0E-24	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
6087	18703	31451	3.17	4.0E-24	AA594178.1	EST_HUMAN	m31h05.s1 NCL_CGAP_Gas1 Homo sapiens cDNA clone IMAGE:1085529 3' similar to SW:POL_MLVRK P31785 POL POLYPROTEIN ;
8015	21154	34068	1.37	4.0E-24	AW813711.1	EST_HUMAN	RC3-ST0197-130100-014-#06 ST0197 Homo sapiens cDNA
11059	23571	36808	1.65	4.0E-24	BE544822.1	EST_HUMAN	601078812F-1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3484488 5'
12185	24405	30880	4.77	4.0E-24	AB028016.1	NT	Homo sapiens mRNA for KIAA1063 protein, partial cds
12428	24611	30889	1.37	4.0E-24	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
8382	20902		2.57	3.0E-24	AW614971.1	EST_HUMAN	h88c08.x1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2987850 3' similar to contains MER29.b2 MER29 repetitive element ;
8414	20954		1.51	3.0E-24	AW962078.1	EST_HUMAN	EST374149 MAGG resequences, MAGG Homo sapiens cDNA
9386	21809	34760	3.79	3.0E-24	AL163252.2	NT	Homo sapiens chromosome 21 segment HS21C052
12247	24458	30959	2.85	3.0E-24	BF127762.1	EST_HUMAN	601810448F-1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4053388 5'
2384	14953	27525	3.07	2.0E-24	AA167539.1	EST_HUMAN	zp11609.r1 Strabegene fetal retina 837202 Homo sapiens cDNA clone IMAGE:609161 5'
3987	18465		0.82	2.0E-24	AW898189.1	EST_HUMAN	RC3-NN0068-080500-021-#03 NN0068 Homo sapiens cDNA
7480	20013	32878	1.14	2.0E-24	AF088824.1	NT	Mus musculus rhoRac-interacting citron kinase (Cik) mRNA, complete cds
8675	21214	34135	2.59	2.0E-24	AL119158.1	EST_HUMAN	DKFZp781L1712_1 781 (synonym: hamy2) Homo sapiens cDNA clone DKFZp781L1712 5'
8712	21251		0.87	2.0E-24	H69214.1	EST_HUMAN	y82x09.r1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:212729 5' similar to contains MER29 repetitive element ;
9768	22268	35250	0.82	2.0E-24	A1521759.1	EST_HUMAN	h77a09.x1 NCL_CGAP_Kd111 Homo sapiens cDNA clone IMAGE:2138008 3'
9768	22268	35251	0.82	2.0E-24	A1521759.1	EST_HUMAN	h77a09.x1 NCL_CGAP_Kd111 Homo sapiens cDNA clone IMAGE:2138008 3'
12080	25082		13.88	2.0E-24	M28877.1	NT	Human O family dispersed repeat element
1734	14325	26867	3.18	1.0E-24	7706340	NT	Homo sapiens CGI-127 protein (LOC51646), mRNA
2697	15254		1.43	1.0E-24	AW820194.1	EST_HUMAN	QV0-ST0284-100400-185-c10 ST0284 Homo sapiens cDNA
3055	15671	28147	0.76	1.0E-24	D88423.1	NT	Mus musculus mRNA for HGT keratin, partial cds
4357	16944		1.97	1.0E-24	AF143313.1	NT	Homo sapiens PTEN (PTEN) gene, exon 2

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7551	20070	32946	4.08	1.0E-24	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
7713	20222	33109	0.8	1.0E-24	BE144528.1	EST_HUMAN	MR0-HT0168-271198-005-c09 HT0168 Homo sapiens cDNA
7885	20427	33335	1.38	1.0E-24	AW801184.1	EST_HUMAN	CMO-NN1010-130300-281-c07 NN1010 Homo sapiens cDNA
11545	23063	37084	1.58	9.0E-26	7708707	NT	Homo sapiens putative secreted protein (SIG1), mRNA
5443	17898		2.05	8.0E-25	6138872	NT	Homo sapiens adrennergic, beta, receptor kinase 2 (ADRBK2), mRNA
5138	17708	30140	2.99	7.0E-25	AA483944.1	EST_HUMAN	ME11 repetitive element; MER1 repetitive element
8160	20701	33616	5.07	7.0E-25	AA408048.1	EST_HUMAN	nc08a09.s1 NCI_CGAP_C03 Homo sapiens cDNA clone IMAGE:880408 3' similar to contains THRL2 THR repetitive element;
11547	23995	37087	9.83	7.0E-25	AA583540.1	EST_HUMAN	nr25106.s1 NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE:914843 similar to SW:R14A_YEAST
7065	18094	33103	4.4	6.0E-25	W87023.1	EST_HUMAN	P36105 PROBABLE 60S RIBOSOMAL PROTEIN L14EA;
7706	20215	36762	10.77	8.0E-25	7305380	NT	z165107.r1 Soares fetal liver spleen_1NFSL_S1 Homo sapiens cDNA clone IMAGE:416089 5'
11198	23701	36762	4.66	5.0E-25	AW978107.1	EST_HUMAN	Mus musculus clogelin (Obag), mRNA
1498	14088	28628	2.75	4.0E-25	T98107.1	EST_HUMAN	EST391217 IMAGE reassessments, MAGP Homo sapiens cDNA
3449	16056		3.2	4.0E-25	AW887871.1	EST_HUMAN	ye58104.r1 Soares fetal liver spleen_1NFSL Homo sapiens cDNA clone IMAGE:121783 5'
3974	18672	29042	1.42	4.0E-25	AF003368.1	NT	PM3-OT0093-280200-001-g07 OT0093 Homo sapiens cDNA
4407	16902		4.05	4.0E-25	BE170867.1	EST_HUMAN	Rattus norvegicus voltage-gated sodium channel mRNA, complete cds
3362	15970	28447	3.73	3.0E-25	8923321	NT	QV3-HT0543-140400-149-s11 HT0543 Homo sapiens cDNA
3362	15970	28448	3.73	3.0E-25	8923321	NT	Homo sapiens hypothetical protein FLJ20344 (FLJ20344), mRNA
5022	17668	30039	0.69	3.0E-25	P28822	SWISSPROT	Homo sapiens hypothetical protein FLJ20344 (FLJ20344), mRNA
6728	18322	32127	0.84	3.0E-25	AA603590.1	EST_HUMAN	KALLISTATIN PRECURSOR (KALLIKREIN INHIBITOR) (PROTEASE INHIBITOR 4)
8279	20820	33739	3.84	3.0E-25	AL163210.2	NT	np27b02.s1 NCI_CGAP_P22 Homo sapiens cDNA clone IMAGE:1117515 3' similar to gb:M61868 ZINC FINGER PROTEIN 85 (HUMAN);
10911	23430	36450	2.02	3.0E-25	AA578013.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
1392	13988	28513	9.82	2.0E-25	5032158	NT	nr30h10.s1 NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE:915331 similar to contains L1.1 L1 repetitive element;
2347	14918	27492	7.8	2.0E-25	BE888016.1	EST_HUMAN	Homo sapiens transducin (beta)-like 1 (TBL1) mRNA
2858	15142	27711	3.84	2.0E-25	P17008	SWISSPROT	601511530F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913087 5'
4268	18854	28301	2.04	2.0E-25	P17008	SWISSPROT	40S RIBOSOMAL PROTEIN S16
4268	18854	28302	2.04	2.0E-25	P17008	SWISSPROT	40S RIBOSOMAL PROTEIN S16
9680	22179	35154	1.9	2.0E-25	AL495173.1	EST_HUMAN	AL495173 Homo sapiens Testis (Starides GS) Homo sapiens cDNA
387	13033	25522	0.71	1.0E-25	AL040229.1	EST_HUMAN	DKFZp434H0313_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434H0313 5'
1291	13886		1.67	1.0E-25	8635487	NT	Human endogenous retrovirus, complete genome

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2478	15045	27613	1.13	1.0E-25	Q06055	SWISSPROT	ATP SYNTHASE LIPID-BINDING PROTEIN P2 PRECURSOR (ATPASE PROTEIN 9) (SUBUNIT C)
4884	17558	30001	3.08	1.0E-25	BE162737.1	EST_HUMAN	PM1-HT0454-080100-002-h09 HTD454 Homo sapiens cDNA
6883	19279		0.85	1.0E-25	AA189080.1	EST_HUMAN	z44506.s1 Stratagene hNT neuron (#837233) Homo sapiens cDNA clone IMAGE:632627 3' similar to contains Alu repetitive element;
6880	24775	32480	3.08	1.0E-25	AA582680.1	EST_HUMAN	mn54h11.s1 NCI CGAP K06 Homo sapiens cDNA clone IMAGE:1087749 3'
7855	20397	33303	4.27	1.0E-25	AA709079.1	EST_HUMAN	z66g04.s1 Soares_fetal_heart_NbHH10W Homo sapiens cDNA clone IMAGE:394822 3' similar to contains PTR5.3 PTR5 repetitive element;
9465	21890	34946	0.88	1.0E-25	X60690.1	NT	R.rattus RY2G5 mRNA for a potential ligand-binding protein
9465	21890	34947	0.88	1.0E-25	X60690.1	NT	R.rattus RY2G5 mRNA for a potential ligand-binding protein
10849	23370	36389	3.71	1.0E-25	U93163.1	NT	Homo sapiens IMAGE-B2 (IMAGE-B2), IMAGE-B3 (IMAGE-B3), IMAGE-B4 (IMAGE-B4), and IMAGE-B1 (IMAGE-B1) genes, complete cds
11787	24171	36777	1.9	1.0E-25	D14547.1	NT	Human DNA, SINE repetitive element
11787	24171	36778	1.9	1.0E-25	D14547.1	NT	Human DNA, SINE repetitive element
2823	15037	27880	1.57	9.0E-28	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
11645	24828		1.68	9.0E-28	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
5872	18494		1.55	8.0E-28	D14547.1	NT	Human DNA, SINE repetitive element
1821	14214	26745	0.92	7.0E-28	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
4952	16849	28117	1.18	7.0E-28	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
4239	16827	29278	2.04	7.0E-28	AW340153.1	EST_HUMAN	hd02e12x1 Soares_NF_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2808368 3'
5819	18443	31185	0.86	7.0E-28	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
11520	23908		8.46	7.0E-28	AA115895.1	EST_HUMAN	zn30d08.l1 Stratagene neuroepithelium NT2RAM1 937234 Homo sapiens cDNA clone IMAGE:548943 5' similar to gbM14338 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN);
12378	24544		3.48	7.0E-28	AW954559.1	EST_HUMAN	EST388829 IMAGE resequences, MAGC Homo sapiens cDNA
2267	14841	27418	2.32	6.0E-28	AF028308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and tyrosinogen gene families
3390	15988	28478	1.37	6.0E-28	AA206131.1	EST_HUMAN	z452h04.l1 Stratagene neuroepithelium (#837231) Homo sapiens cDNA clone IMAGE:949271 5'
10428	22920	35822	0.48	6.0E-28	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
10428	22920	35823	0.48	6.0E-28	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
11531	23979	37049	5.92	6.0E-28	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1219	13819	26334	3.55	5.0E-28	A1708235.1	EST_HUMAN	as38h08.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2319519 3' similar to WP-F48C12.11 CE03371;
1219	13819	26335	3.55	5.0E-28	A1708235.1	EST_HUMAN	as38h08.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2319519 3' similar to WP-F48C12.11 CE03371;

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1591	14184		2.25	4.0E-26	AA329548.1	EST_HUMAN	EST133448 Embryo, 12 week II Homo sapiens cDNA 5' end
9333	21847		3.53	4.0E-26	7657670	NT	Homo sapiens upstream binding transcription factor, RNA polymerase I (UBTF), mRNA
10539	23078	36090	3.69	4.0E-26	BE268187.1	EST_HUMAN	601191345F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3536210 5'
1796	14388	26630	1.2	3.0E-26	D14647.1	NT	Human DNA, SINE repetitive element
2048	14628	27197	1	3.0E-26	AL045855.2	EST_HUMAN	DKFZp434I066_j1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434I066 5'
2077	14657		2.22	3.0E-26	AA115895.1	EST_HUMAN	z330d08.t1 Stragene neocapitellum NT2RAM1 937234 Homo sapiens cDNA clone IMAGE:548943 5' similar to gb:U14338 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN);
3846	18445	26808	1.48	3.0E-26	AA152484.1	EST_HUMAN	z330f10.t1 Stragene colon (8837204) Homo sapiens cDNA clone IMAGE:588427 5' similar to TR:G695374
3846	18445	26807	1.48	3.0E-26	AA152484.1	EST_HUMAN	G695374 THYROID RECEPTOR INTERACTOR ;
6891	19489	32311	6.04	3.0E-26	BF245458.1	EST_HUMAN	z330f10.t1 Stragene colon (8837204) Homo sapiens cDNA clone IMAGE:588427 5' similar to TR:G695374
10804	23139		1.87	3.0E-26	AF039405.1	NT	G695374 THYROID RECEPTOR INTERACTOR ;
11442	23892	36957	2.58	3.0E-26	AW875651.1	EST_HUMAN	z330f10.t1 Stragene colon (8837204) Homo sapiens cDNA clone IMAGE:588427 5' similar to TR:G695374
11442	23892	36958	2.58	3.0E-26	AW875651.1	EST_HUMAN	G695374 THYROID RECEPTOR INTERACTOR ;
11472	23922	36962	13.09	3.0E-26	AA593173.1	EST_HUMAN	601884983F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4083278 5'
12566	24065		2.21	3.0E-26	AW073434.1	EST_HUMAN	Homo sapiens MLL (MLL) gene, exons 1-3, and partial cds
12661	24732	30857	1.48	3.0E-26	AF165520.1	NT	QV2-PT0012-040400-124-e05 PT0012 Homo sapiens cDNA
710	13331	26818	5.38	2.0E-26	AL163282.2	NT	QV2-PT0012-040400-124-e05 PT0012 Homo sapiens cDNA
1809	14494		2.42	2.0E-26	AL039089.2	EST_HUMAN	m37d05.s1 NCI_CGAP_GCS Homo sapiens cDNA clone IMAGE:1088057 3' similar to contains OFR.t1
3288	15880	26363	4.94	2.0E-26	X86904.1	NT	OFR repetitive element ;
10633	23165		3.35	2.0E-26	D87675.1	NT	xa57b09.x1 NCI_CGAP_HSC2 Homo sapiens cDNA clone IMAGE:2570873 3' similar to contains MER30.t1
11096	23607	36847	5.24	2.0E-26	AB01412.1	EST_HUMAN	MER30 repetitive element ;
11268	23748		2.17	2.0E-26	AF055066.1	NT	Homo sapiens phorbol 1 protein (PBI) mRNA, complete cds
11894	24237		1.85	2.0E-26	AB037859.1	NT	Homo sapiens chromosome 21 segment HS21C082
12101	25005	30812	3.03	2.0E-26	BE11435947	NT	DKFZp568L171.s1 568 (synonym: htkd2) Homo sapiens cDNA clone DKFZp568L171 3'
142	12807	25295	13.71	1.0E-26	BE170371.1	EST_HUMAN	M.musculus mRNA for astrocytic phosphoprotein, PEA-16
2091	14871	27241	1.5	1.0E-26	AL039363.2	EST_HUMAN	Homo sapiens DNA for amyloid precursor protein, complete cds
2598	15160	27728	1.48	1.0E-26	BE814985.1	EST_HUMAN	1688601.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2185416 3' similar to contains Alu
2710	15267		6.31	1.0E-26	AF261065.1	NT	repetitive element; contains element MER20 MER20 repetitive element ;
6927	19588		2.52	1.0E-26	BE165980.1	EST_HUMAN	Homo sapiens MHC class 1 region
							Homo sapiens mRNA for KIAA1438 protein, partial cds
							Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
							QV4-HT0538-020300-123-e02 HT0538 Homo sapiens cDNA
							DKFZp434H1910_j1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434H1910 5'
							MR2-BN0114-240500-030-g07 BN0114 Homo sapiens cDNA
							Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GADPH) mRNA, complete cds
							MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10772	23298		2.98	1.0E-28	AL038487.1	EST_HUMAN	DKF7p568C2148_r1 568 (synonym: h142) Homo sapiens cDNA clone DKF7p568C2148 5'
12151	25084		2.79	1.0E-28	H55083.1	EST_HUMAN	CHIR220032 Chromosome 22 exon Homo sapiens cDNA clone C22_45 5'
12625	24703		1.27	1.0E-28	AW408742.1	EST_HUMAN	U1-HF-BMO-adv-d-10-Q-U1_r1 NH_MGC_38 Homo sapiens cDNA clone IMAGE:3083210 5'
7584	20089		1.17	9.0E-27	BF371227.1	EST_HUMAN	RC8-FN0138-110800-022-A02 FN0138 Homo sapiens cDNA
9227	21949		4	9.0E-27	U83183.1	NT	Homo sapiens IMAGE-B2 (IMAGE-B2), IMAGE-B3 (IMAGE-B3), IMAGE-B4 (IMAGE-B4), and IMAGE-B1 (IMAGE-B1) genes, complete cds
11648	24080		6.15	9.0E-27	BF445558.1	EST_HUMAN	nead3c07.x1 NCI_CGAP_F128 Homo sapiens cDNA clone IMAGE:3253844 3' similar to contains OFR.L1
11	12680	25148	3.07	8.0E-27	A831482.1	EST_HUMAN	OFR repetitive element
583	13213		3.36	8.0E-27	AL163227.2	NT	W48c04.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2408150 3' similar to contains THR.B2
1461	14053	26585	28.2	8.0E-27	AW182737.1	EST_HUMAN	TI-R repetitive element
1461	14053	26588	28.2	8.0E-27	AW182737.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C027
2212	14787	27382	1.48	8.0E-27	AW864776.1	EST_HUMAN	eu87n08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783296 3' similar to gb:K00558
3219	15831	28310	1.89	8.0E-27	P12236	SWISSPROT	TUBULIN ALPHA-1 CHAIN (HUMAN);
3398	16004	28485	0.59	8.0E-27	AF181887.1	NT	eu87n08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783296 3' similar to gb:K00558
5873	18495	31221	1.14	8.0E-27	AV732214.1	EST_HUMAN	TUBULIN ALPHA-1 CHAIN (HUMAN);
7054	18073		2.9	8.0E-27	BE828560.1	EST_HUMAN	PM2-SN0018-220300-002-607 SN0018 Homo sapiens cDNA
7111	19451	32287	2.49	8.0E-27	N84970.1	EST_HUMAN	ADP ATP CARRIER PROTEIN, LIVER ISOFORM T2 (ADP/ATP TRANSLOCASE 3)(ADENINE
9138	21671	34813	1.35	8.0E-27	AW857579.1	EST_HUMAN	NUCLEOTIDE TRANSLOCATOR 3 (ANT 3)
9138	21671	34814	1.35	8.0E-27	AW857579.1	EST_HUMAN	Homo sapiens WRN (WRN) gene, complete cds
712	13333		1.39	7.0E-27	Z70884.1	NT	AV732214 HTF Homo sapiens cDNA clone HTFBC808 5'
5252	17815		2.68	7.0E-27	AW628172.1	EST_HUMAN	MR4-BT0398-250800-204-608 BT0398 Homo sapiens cDNA
8791	21330		0.77	7.0E-27	D86984.1	NT	J1751F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone J1751 5' similar to
10828	23160		4.39	7.0E-27	AJ271735.1	NT	REPTITIVE ELEMENT L1
12288	24496		3.27	7.0E-27	AV723365.1	EST_HUMAN	AV732214 HTF Homo sapiens cDNA clone HTFBC808 5'
10605	23139	36151	11.92	6.0E-27	M28687.1	NT	Human endogenous retroviral element HC2
11621	24083	37127	2.33	6.0E-27	U83183.1	NT	Human endogenous retroviral element HC2
							Human nuclear protein (B23) mRNA, complete cds
							Human mRNA for KIAA0231 gene, partial cds
							Human sapiens Xq pseudautosomal region; segment 12
							AV723365 HTB Homo sapiens cDNA clone HTBAHE02 5'
							Human nuclear protein (B23) mRNA, complete cds
							Homo sapiens IMAGE-B2 (IMAGE-B2), IMAGE-B3 (IMAGE-B3), IMAGE-B4 (IMAGE-B4), and IMAGE-B1 (IMAGE-B1) genes, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7752	20280		0.79	5.0E-27	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21G103
10136	22631	35619	2.86	5.0E-27	BF686814.1	EST_HUMAN	602121491F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4278527 5'
10136	22631	35620	2.86	5.0E-27	BF686814.1	EST_HUMAN	602121491F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4278527 5'
2423	14991	27664	4.86	4.0E-27	D25303.1	NT	Human mRNA for integrin alpha subunit, complete cds
6842	19432	32247	1.37	4.0E-27	9910569	NT	Mus musculus sperm tail associated protein (Stap), mRNA
7890	20422		1.14	4.0E-27	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
7925	20467		1.22	4.0E-27	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
9659	22158	35130	0.8	4.0E-27	AW880959.1	EST_HUMAN	QV0-OT0033-070300-152-b10 OT0033 Homo sapiens cDNA
11473	23923	36993	2.38	4.0E-27	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
2095	14688	27237	6.19	3.0E-27	X80658.1	NT	R. rattus RYA3 mRNA for a potential ligand-binding protein
4359	16945	26387	1.56	3.0E-27	BE071924.1	EST_HUMAN	FM0-BT0527-090109-001-d11 BT0527 Homo sapiens cDNA
5549	18181	30596	6.22	3.0E-27	AA077705.1	EST_HUMAN	7844C08 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7844C08
9229	21951	34900	3.67	3.0E-27	BF036327.1	EST_HUMAN	601458631F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3962086 5'
45	12724	25165	29.69	2.0E-27	AF054187.1	NT	Homo sapiens alpha NAC mRNA, complete cds
1940	14524		12.18	2.0E-27	AA568345.1	EST_HUMAN	nd01b10.s1 NCL_CGAP_P11 Homo sapiens cDNA clone IMAGE:1000699 similar to gb:M17886.60S
3143	15757		12.54	2.0E-27	AW629172.1	EST_HUMAN	h51h112.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2875879 3' similar to TR:078040
3261	15873	28363	1.74	2.0E-27	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
3261	15873	28354	1.74	2.0E-27	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
6779	16370	32185	0.88	2.0E-27	H02855.1	EST_HUMAN	Y36a01.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:150940 5' similar to
8034	20578	33481	1.24	2.0E-27	AI666347.1	EST_HUMAN	SP-HMGC_MOUSE_Q02591 HOMEBOX PROTEIN ;
9183	21710		2.25	2.0E-27	AA551527.1	EST_HUMAN	w28g07.x1 NCL_CGAP_UH Homo sapiens cDNA clone IMAGE:2426288 3'
9707	22205	35178	1	2.0E-27	X60658.1	NT	nh08h05.s1 NCL_CGAP_Thyl1 Homo sapiens cDNA clone IMAGE:943737 similar to contains L1.L3 L1 repetitive element ;
9948	22443	35421	1.03	2.0E-27	M78590.1	EST_HUMAN	R. rattus RYA3 mRNA for a potential ligand-binding protein
9948	22443	35422	1.03	2.0E-27	M78590.1	EST_HUMAN	EST00738 Fetal brain, Strabagene (cat#636206) Homo sapiens cDNA clone HFBCF07
10634	23355	36370	3.36	2.0E-27	AU121685.1	EST_HUMAN	EST00738 Fetal brain, Strabagene (cat#636206) Homo sapiens cDNA clone HFBCF07
11360	14524		16.86	2.0E-27	AA568345.1	EST_HUMAN	AU121685 MANMA1 Homo sapiens cDNA clone MANMA1000746 5'
461	13065		1.17	1.0E-27	AL163246.2	NT	nh01b10.s1 NCL_CGAP_P11 Homo sapiens cDNA clone IMAGE:1000698 similar to gb:M17886.60S
						EST_HUMAN	ACIDIC RIBOSOMAL PROTEIN P1 (HUMAN);
						NT	Homo sapiens chromosome 21 segment HS21C046

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1034	13944	26157	1.25	1.0E-27	AB023898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
4155	18747		1.02	1.0E-27	BE350127.1	EST_HUMAN	h08g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3148258 3' similar to contains MER29.b3
8885	19261	32085	6.88	1.0E-27	6005855	NT	MER29 repetitive element ;
6852	19529	32353	1.86	1.0E-27	F30158.1	EST_HUMAN	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
6852	19529	32354	1.86	1.0E-27	F30158.1	EST_HUMAN	HSPD20461 HM3 Homo sapiens cDNA clone s4000095C10
8548	21085	34008	0.7	1.0E-27	AB007823.1	EST_HUMAN	HSPD20461 HM3 Homo sapiens cDNA clone s4000095C10
8818	21454		1.89	1.0E-27	BE078780.1	EST_HUMAN	Homo sapiens mRNA for KIAA0454 protein, partial cds
9638	22138	35104	2.68	1.0E-27	D87449.1	EST_HUMAN	RC8-BT0627-140200-011-E08 BT0627 Homo sapiens cDNA
11551	23669	37071	3.65	1.0E-27	AF111083.1	NT	Human mRNA for KIAA0280 gene, partial cds
148	12810		2.02	9.0E-28	BE348398.1	EST_HUMAN	Bos taurus latrophilin 3 splice variant block mRNA, complete cds
333	12885	25472	2.19	9.0E-28	AU126280.1	EST_HUMAN	hwt7c11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3183188 3' similar to TR:Q07314 Q07314
11732	24137		4.71	9.0E-28	BF377859.1	EST_HUMAN	SECRETED NEUREXIN III-ALPHA-C PRECURSOR, [3] TR:Q07280 TR:Q07313 ;
12068	24923		4.41	8.0E-28	AW157571.1	EST_HUMAN	AU128280 NT2RP1 Homo sapiens cDNA clone NT2RP1000443 5'
1223	13823	26338	16.9	7.0E-28	AU142750.1	EST_HUMAN	CM2-TN0140-070800-372-g01 TN0140 Homo sapiens cDNA
11068	23578	36616	3.08	7.0E-28	11417868	NT	aus3h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782911 3' similar to
11688	24104		2.37	7.0E-28	AV735348.1	EST_HUMAN	TR:O60302 O60302 KIAA0555 PROTEIN ; contains element MER22 repetitive element ;
8850	21369		1.04	6.0E-28	AF016052.1	NT	AU142750 Y79AA1 Homo sapiens cDNA clone Y79AA1000824 5'
12346	24527		12.5	6.0E-28	AA504502.1	EST_HUMAN	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGT1A1), mRNA
340	12862		2.28	5.0E-28	AJ821003.1	EST_HUMAN	Homo sapiens zinc finger protein ZNF191 (ZNF191) gene, complete cds
4081	16677	29137	1.78	5.0E-28	R79782.1	EST_HUMAN	as80e03.r1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:825340 5' similar to contains Alu
2854	15213	27788	1.12	4.0E-28	AW185088.1	EST_HUMAN	repetitive element/contains element PTR5 repetitive element ;
3005	15821	28068	0.78	4.0E-28	4505316	NT	wc18e07.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2455892 3' similar to contains THR.b1
3142	15756	28223	3.13	4.0E-28	BE409100.1	EST_HUMAN	THR repetitive element ;
7968	19894	32757	1.79	4.0E-28	AJ188841.1	EST_HUMAN	y88f10.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:148443 5'
10745	23269		4.9	4.0E-28	AF028308.1	NT	xn33c09.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2895504 3' similar to SW:GG95_HUMAN
							Q08379 GOLGN-65 ;
							Homo sapiens myosin phosphatase, target subunit 1 (MYPT1), mRNA
							601300703F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635305 5'
							q68f10.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755019 3' similar to gb:M18503 LINE-1
							REVERSE TRANSCRIPTASE HOMOLOG (HUMAN);
							Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and tyrosinogen gene families

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10885	23408		25.24	4.0E-28	AB038241.1	NT	Felis catus GAPDH mRNA for glyceraldehyde-3-phosphate dehydrogenase, complete cds
10804	18894	32757	3.33	4.0E-28	AI198941.1	EST_HUMAN	qf68f10.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1755019 3' similar to gb:M18503 LINE-1
12118	24375		1.71	4.0E-28	AW854244.1	EST_HUMAN	REVERSE TRANSCRIPTASE HOMOLOG (HUMAN);
12657	24728		72.51	4.0E-28	AW157571.1	EST_HUMAN	RC3-CT0254-240400-210-112 CT0254 Homo sapiens cDNA
1328	13820		1.95	3.0E-28	AF155382.1	NT	al83h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2762811 3' similar to
8761	21300	34221	3.77	3.0E-28	BF354030.1	EST_HUMAN	TRC080302 O60302 KIAA0555 PROTEIN, contains element MER22 repetitive element;
10815	23336	36349	2.08	3.0E-28	U53588.1	NT	Homo sapiens metalloprotease-like, disintegrin-like, cysteine-rich protein 2 epsilon (ADAM22) mRNA, complete cds
12147	24390		2.53	3.0E-28	AI831081.1	EST_HUMAN	MP3-HT0713-280500-013-f09 HT0713 Homo sapiens cDNA
12284	24488		1.77	3.0E-28	BE082801.1	EST_HUMAN	Homo sapiens MHC class 1 region
92	12788	26251	8.71	2.0E-28	BE082167.1	EST_HUMAN	wj98f07.x1 NC1_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2410885 3' similar to contains Alu repetitive element; contains element HGR repetitive element;
1207	13807	26320	9.63	2.0E-28	Y11107.3	NT	RC2-BT0842-210200-013-f03 BT0842 Homo sapiens cDNA
2517	15081	27654	2.47	2.0E-28	AI348834.1	EST_HUMAN	RC1-BT0254-220300-019-c05 BT0254 Homo sapiens cDNA
3407	16018	28495	0.84	2.0E-28	AL163209.2	NT	Homo sapiens ITGB4 gene for Integrin beta 4 subunit, exons 3-41
8449	19050	31836	1.2	2.0E-28	BF224402.1	EST_HUMAN	qp35b08.x1 NC1_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1810483 3' similar to contains L1.b2 L1 repetitive element;
6472	19073		5.22	2.0E-28	BF212905.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C009
7889	20530	33437	0.77	2.0E-28	AF005273.1	NT	hr76c03.x1 NC1_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134404 3' similar to contains LOR1.b1
9505	22005		11	2.0E-28	AW972306.1	EST_HUMAN	LOR1 repetitive element;
11481	23831	37002	1.91	2.0E-28	AF224688.1	NT	601814198F1 NIH_MGC_34 Homo sapiens cDNA clone IMAGE:4048751 5'
12127	24383		1.74	2.0E-28	H08378.1	EST_HUMAN	Sus scrofa domestica submaxillary apomucin mRNA, complete cds
1526	14118	26855	3.52	1.0E-28	D39044.1	NT	EST384394 IMAGE resequences, MAGL Homo sapiens cDNA
2261	14835	27413	1.84	1.0E-28	BF333236.1	EST_HUMAN	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
2708	15285	27832	1.38	1.0E-28	AF000905.1	NT	y78c09.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:44300 5'
4668	17250		0.96	1.0E-28	U09410.1	NT	Human gene for Ah-receptor, exon 7-9
7801	20344		7.09	1.0E-28	11423885	NT	QV1-BT0821-120900-360-b03 BT0821 Homo sapiens cDNA
7961	20503		3.2	1.0E-28	8022763	NT	Homo sapiens ubiquitous TPR motif, Y isoform (UTY) mRNA, alternative transcript 2, complete cds
8202	21719	34663	4.72	1.0E-28	AA308744.1	EST_HUMAN	Human zinc finger protein ZNF131 mRNA, partial cds
							Homo sapiens similar to ribosomal protein L12 (H. sapiens) (LOC83091), mRNA
							Homo sapiens hypothetical protein FLJ10988 (FLJ10988), mRNA
							EST179615 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to similar to retroviral LTR

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9780	22288	35272	9.67	1.0E-28	4758431	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGT1A1), mRNA
9790	22288	35273	9.67	1.0E-28	4758431	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGT1A1), mRNA
11683	24108		10.45	1.0E-28	AA054182.1	EST_HUMAN	z151c01.r1 Soares retina N2b-4HR Homo sapiens cDNA clone IMAGE:380448 5'
12484	24811		1.56	1.0E-28	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
12588	25034	30502	3.5	9.0E-28	AW663987.1	EST_HUMAN	H76g08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978268 3'
12245	24456		5.36	8.0E-29	Q00130	SWISSPROT	HYPOTHETICAL GENE 50 PROTEIN
1848	14238	28773	1.04	7.0E-29	AW66447.1	EST_HUMAN	EST378521 MAGE resequences, MAGI Homo sapiens cDNA
3607	16211		0.91	7.0E-29	BE254708.1	EST_HUMAN	EST378521 MAGE resequences, MAGI Homo sapiens cDNA
12644	24718		13.85	7.0E-28	AJ132352.1	NT	001114880F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3355367 5'
621	13248	25722	7.35	6.0E-29	A838748.1	EST_HUMAN	Rattus norvegicus mRNA for 45 kDa secretory protein, partial
12002	24307		9.28	6.0E-29	BE940436.1	EST_HUMAN	wp68b01.x1 NCI_CGAP_Bim25 Homo sapiens cDNA clone IMAGE:2468885 3' similar to TR:O15475
5138	17710		1.02	5.0E-29	AL163203.2	NT	O15475 UNNAMED HERV-H PROTEIN :contains LTR7.b1 LTR7 repetitive element :
8688	21205		7.83	5.0E-29	AW887541.1	EST_HUMAN	RC3-UT0062-210800-021-c05 UT0062 Homo sapiens cDNA
12276	24480		1.32	5.0E-29	BE012449.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
3289	15881		2.92	4.0E-29	A1752367.1	EST_HUMAN	RC3-OT0091-170300-011-c12 OT0091 Homo sapiens cDNA
6160	18773		6.52	4.0E-29	BE164830.1	EST_HUMAN	001451827F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3855728 5'
8025	20587	33489	0.92	4.0E-28	A1678101.1	EST_HUMAN	cn15c02.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn15c02 random
8025	20587	33470	0.92	4.0E-29	A1678101.1	EST_HUMAN	QV1-HT0471-280300-121-e05 HT0471 Homo sapiens cDNA
8880	21219	34139	6.03	4.0E-29	J04988.1	NT	wd35g06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330170 3' similar to contains
4508	17090	29538	1.58	3.0E-28	AB042297.1	NT	MER29.12 MER29 repetitive element ;
4838	17417	28870	1.28	3.0E-28	BF333236.1	EST_HUMAN	Human 90 kD heat shock protein gene, complete cds
6088	18704	31452	0.88	3.0E-29	BE314018.1	EST_HUMAN	Homo sapiens PTS gene for 6-pyruvoylhistidinol synthase, complete cds
8688	21207	34124	2.6	3.0E-28	D38044.1	NT	QV1-BT0821-120900-360-b03 BT0821 Homo sapiens cDNA
							601152657F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3508327 5'
							Human gene for Ah-receptor, exon 7-9
8224	21740	34683	1.93	3.0E-28	AW303317.1	EST_HUMAN	x017f03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813405 3' similar to contains Alu
9450	21976		2.01	3.0E-28	AL163246.2	NT	repetitive element/contains MER19.12 MER19 repetitive element ;
8869	22386		0.76	3.0E-28	BE350127.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
11148	23656	36888	1.88	3.0E-29	AA403053.1	EST_HUMAN	h009g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146266 3' similar to contains MER29.b3
							MER29 repetitive element ;
							262601.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728889 5' similar to TR:G1335769
							G1335769 GAG-POL POLYPOLYPROTEIN. ;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11891	24234		2.61	3.0E-28	D33882.1	NT	Human Hs.Lm15 mRNA for Hs.Lm15, complete cds
12553	25044		1.85	3.0E-28	D33882.1	NT	Human Hs.Lm15 mRNA for Hs.Lm15, complete cds
518	13150	25632	1.07	2.0E-28	AF084869.1	NT	Homo sapiens envelope protein RIC-6 (env) gene, complete cds
518	13150	25633	1.07	2.0E-28	AF084869.1	NT	Homo sapiens envelope protein RIC-6 (env) gene, complete cds
1590	14173	26703	7.28	2.0E-28	A1963804.1	EST_HUMAN	wr66d10.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2492563 3' similar to TR:O15548 O15548 HERV-E ENVELOPE GLYCOPROTEIN;
1580	14173	26704	7.28	2.0E-28	A1963804.1	EST_HUMAN	wr66d10.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2492563 3' similar to TR:O15548 O15548 HERV-E ENVELOPE GLYCOPROTEIN;
4368	16953	28383	2.01	2.0E-28	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C088
5991	18611	31348	0.86	2.0E-28	A1082459.1	EST_HUMAN	ca71e04.x1 NCI_CGAP_GC2 Homo sapiens cDNA clone IMAGE:1610814 3' similar to contains L1.12 L1 repetitive element;
6327	18633	31708	1.45	2.0E-28	A1086418.1	EST_HUMAN	wf27g07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356860 3' similar to contains element MER6 repetitive element;
7660	18633	31708	1.2	2.0E-28	A1086418.1	EST_HUMAN	wf27g07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356860 3' similar to contains element MER6 repetitive element;
7917	20459	33366	1.15	2.0E-28	BE867157.1	EST_HUMAN	601442206F1 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:3846848 5'
8514	21053	33975	0.55	2.0E-28	10567821	NT	Homo sapiens DNA-binding protein (LOC58242), mRNA
8514	21053	33978	0.55	2.0E-28	10567821	NT	Homo sapiens DNA-binding protein (LOC58242), mRNA
9427	21936	34884	3.74	2.0E-28	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
9427	21938	34885	3.74	2.0E-28	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
10139	22633	35622	3.15	2.0E-28	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
10139	22633	35623	3.15	2.0E-28	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
11350	23805		2.03	2.0E-28	11425108	NT	Homo sapiens splicing factor similar to dnal (SPF31), mRNA
11360	23842		2.46	2.0E-28	AW880701.1	EST_HUMAN	QV0-OT0032-080300-155-401 OT0032 Homo sapiens cDNA
11635	24075		1.83	2.0E-28	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
8727	21266	34186	7.44	1.0E-28	AW983980.1	EST_HUMAN	RC1-HN0003-220300-021-804 HN0003 Homo sapiens cDNA
10503	22897	36008	0.76	1.0E-28	X60858.1	NT	Rattus RYA3 mRNA for a potential ligand-binding protein
6696	19282	32066	3.08	9.0E-30	AA761215.1	EST_HUMAN	nz20c07.s1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1288332 3' similar to contains MER4.b1 MER4 repetitive element;
11773	24162		2.08	9.0E-30	11422745	NT	Homo sapiens zinc finger regulated transporter-like (ZIRTL), mRNA
6461	19062		9.33	8.0E-30	F08988.1	EST_HUMAN	HSC23F051 normalized infant brain cDNA Homo sapiens cDNA clone c-23f05
8214	20755	33669	2.65	8.0E-30	AA383873.1	EST_HUMAN	EST97317 Thymus I Homo sapiens cDNA 5' and similar to EST containing O family repeat
8617	21158	34089	4.84	8.0E-30	AI557072.1	EST_HUMAN	PT2.1_13_B11.r tumor2 Homo sapiens cDNA 3'
1562	14154		0.91	7.0E-30	BE091133.1	EST_HUMAN	PM4-BT0724-150400-004-d11 BT0724 Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7779	20291	33190	1.28	7.0E-30	BF03327.1	EST_HUMAN	601458531F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3862088 5'
1810	14400	28845	1.35	8.0E-30	D25303.1	NT	Human mRNA for integrin alpha subunit, complete cds
3224	15838	28314	2.38	8.0E-30	BE008028.1	EST_HUMAN	QVO-BN0147-280400-214-f12 BN0147 Homo sapiens cDNA
4872	15838	28314	1.1	8.0E-30	BE008028.1	EST_HUMAN	QVO-BN0147-280400-214-f12 BN0147 Homo sapiens cDNA
10432	22828	36832	0.72	8.0E-30	AF17727.1	NT	Homo sapiens CTCL tumor antigen sc20-10 mRNA, partial cds
12815	18024		1.8	8.0E-30	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
4085	16881	28141	39.51	5.0E-30	AK366892.1	EST_HUMAN	ig2g03.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2116276 3' similar to contains Alu repetitive element
5448	24850		4.03	5.0E-30	U87831.1	NT	Human acornate hydratase (ACO2) gene, exon 7
10787	23291		3.31	5.0E-30	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
11034	23548	36583	8.29	5.0E-30	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
11034	23548	36584	8.29	5.0E-30	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
2188	14784	27333	1.32	4.0E-30	AW637471.1	EST_HUMAN	QV3-DT0043-080200-080-c06 DT0043 Homo sapiens cDNA
2188	14784	27334	1.32	4.0E-30	AW637471.1	EST_HUMAN	QV3-DT0043-080200-080-c06 DT0043 Homo sapiens cDNA
8838	21375	34298	3.16	4.0E-30	AW612488.1	EST_HUMAN	CM1-ST0181-081189-035-f08 ST0181 Homo sapiens cDNA
1191	13782		3.43	3.0E-30	AI338551.1	EST_HUMAN	qq8005.x1 Sources total_fetus Nb2Hf8_9w Homo sapiens cDNA clone IMAGE:1838820 3' similar to contains MER29 b2 MER29 repetitive element
3821	16421	28883	0.87	3.0E-30	AF128893.1	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-8
7883	20435		0.47	3.0E-30	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
8423	20963		0.5	3.0E-30	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
10330	22824	35820	1.89	3.0E-30	BE350127.1	EST_HUMAN	h00901.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146258 3' similar to contains MER29 b3 MER29 repetitive element
10460	22854	35884	0.53	3.0E-30	AB032869.1	NT	Homo sapiens mRNA for KIAA1143 protein, partial cds
10460	22854	35885	0.53	3.0E-30	AB032869.1	NT	Homo sapiens mRNA for KIAA1143 protein, partial cds
11084	23596	36632	1.76	3.0E-30	P34056	SWISSPROT	TRANSCRIPTION FACTOR AP-2
703	13324	25811	1.3	2.0E-30	AW857315.1	EST_HUMAN	CMO-CT0307-310100-188-f03 CT0307 Homo sapiens cDNA
1123	13728		2.35	2.0E-30	F08888.1	EST_HUMAN	HSC23F051 normalized infant brain cDNA Homo sapiens cDNA clone c-23f05
1527	14119	28856	7.23	2.0E-30	BE175877.1	EST_HUMAN	RC5-HT0582-110400-013-f08 HT0582 Homo sapiens cDNA
2740	15295	27882	9.08	2.0E-30	BE765232.1	EST_HUMAN	IL2-NT0101-280700-116-E04 NT0101 Homo sapiens cDNA
2944	15580	28034	6.74	2.0E-30	AF114158.1	NT	Homo sapiens Y-linked zinc finger protein (ZFY) gene, complete cds
3857	16455	28919	2.18	2.0E-30	AW208881.1	EST_HUMAN	UI-H-BH-af0-c-12-Q-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722568 3'
4882	17487	28822	2.07	2.0E-30	BE288945.1	EST_HUMAN	601118660F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3029438 5'
4882	17487	28823	2.07	2.0E-30	BE288945.1	EST_HUMAN	601118660F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3029438 5'
6855	19443	32259	0.92	2.0E-30	BF306337.1	EST_HUMAN	601893208F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4138893 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8412	20962	33871	0.81	2.0E-30	AA019103.1	EST_HUMAN	z68c10.r1 Soares retina N2b-4HR Homo sapiens cDNA clone IMAGE:363186 5'
8474	21014	33830	5.63	2.0E-30	C18839.1	EST_HUMAN	C18839 Human placenta cDNA (TFujiiwara) Homo sapiens cDNA clone GEN-670C01 5'
8570	21109	34027	3.55	2.0E-30	BE670617.1	EST_HUMAN	7e37c12.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284662 3' similar to SW:DHSA_HUMAN P31040 SUCCINATE DEHYDROGENASE [UBIQUINONE] FLAVOPROTEIN SUBUNIT PRECURSOR;
8570	21109	34028	3.55	2.0E-30	BE670617.1	EST_HUMAN	7e37c12.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284662 3' similar to SW:DHSA_HUMAN P31040 SUCCINATE DEHYDROGENASE [UBIQUINONE] FLAVOPROTEIN SUBUNIT PRECURSOR;
8908	22405	35380	3.21	2.0E-30	AW971568.1	EST_HUMAN	EST383057 MAGE resequences, MAGL Homo sapiens cDNA
8964	22486	35477	6.11	2.0E-30	AW470781.1	EST_HUMAN	h33408.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2875499 3' similar to contains THR.b3 THR repetitive element;
308	12863	25452	12.31	1.0E-30	C18839.1	EST_HUMAN	C18839 Human placenta cDNA (TFujiiwara) Homo sapiens cDNA clone GEN-670C01 5'
563	13194	25873	3.84	1.0E-30	AW468897.1	EST_HUMAN	h33408.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:368598 3'
745	13365	25859	2.7	1.0E-30	AL163203.2	NT	MER1.13 MER1 MER1 repetitive element;
2253	14827	27403	3.59	1.0E-30	AA864377.1	EST_HUMAN	ae77b08.s1 Stratiene lung (#837210) Homo sapiens cDNA clone IMAGE:868598 3'
2502	15068	27840	1.84	1.0E-30	BF347728.1	EST_HUMAN	602022560F1 NCI_CGAP_Bir87 Homo sapiens cDNA clone IMAGE:4157891 5'
3035	15651	28129	1.38	1.0E-30	5803081	NT	Homo sapiens methionine aminopeptidase, aIF-2-associated p87 (MANEP), mRNA
3080	15705	28177	1.08	1.0E-30	AA315045.1	EST_HUMAN	EST186868 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end
7708	20217	33105	16.59	1.0E-30	BF183230.1	EST_HUMAN	601808932F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040694 5'
12268	25029		1.48	1.0E-30	AA289211.1	EST_HUMAN	EST11688 Uterus Homo sapiens cDNA 5' end
12411	24949		8.63	1.0E-30	H55593.1	EST_HUMAN	CHR220532 Chromosome 22 exon Homo sapiens cDNA clone C22_728 5'
3828	16429	28890	0.72	9.0E-31	T73025.1	EST_HUMAN	ye65a08.r1 Stratiene liver (#837224) Homo sapiens cDNA clone IMAGE:85570 5'
3829	16429	28891	0.72	9.0E-31	T73025.1	EST_HUMAN	ye65a08.r1 Stratiene liver (#837224) Homo sapiens cDNA clone IMAGE:85570 5'
8288	20807	33725	1.03	9.0E-31	R18214.1	EST_HUMAN	ye66b08.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:30568 5' similar to gb:X12853 RAS- RELATED PROTEIN RAB-2 (HUMAN);
8288	20807	33728	1.03	9.0E-31	R18214.1	EST_HUMAN	ye66b08.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:30568 5' similar to gb:X12853 RAS- RELATED PROTEIN RAB-2 (HUMAN);
8559	21098		1.84	9.0E-31	Z38293.1	EST_HUMAN	HSC05F032 normalized infant brain cDNA Homo sapiens cDNA clone c-05f03 3'
8561	21100	34020	0.52	9.0E-31	AF078778.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
12840	24715	30887	1.89	9.0E-31	6755441	NT	Mus musculus syndecan 4 (Sdc4), mRNA
1115	13719	28230	6.84	8.0E-31	8923389	NT	Homo sapiens hypothetical protein FLJ20420 (FLJ20420), mRNA
2457	15024		4.22	8.0E-31	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
11801	24810		2.71	8.0E-31	AF012385.1	EST_HUMAN	AF012385 Human testis (C. De Smet) Homo sapiens cDNA clone TDF3.12b

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
740	13380		2.5	7.0E-31	AA372637.1	EST_HUMAN	EST184555 Colon adenocarcinoma IV Homo sapiens cDNA 5' end
2682	15248	27818	2.37	7.0E-31	BE326517.1	EST_HUMAN	hw05a11.x1 NCI CGAP Lu24 Homo sapiens cDNA clone IMAGE:3182012 3'
2682	15248	27818	2.37	7.0E-31	BE326517.1	EST_HUMAN	hw05a11.x1 NCI CGAP Lu24 Homo sapiens cDNA clone IMAGE:3182012 3'
8340	20881	33800	0.82	7.0E-31	AF208541.1	NT	Homo sapiens V1-vascular vasopressin receptor AVPR1A gene, promoter region and partial cds
8340	20881	33801	0.82	7.0E-31	AF208541.1	NT	Homo sapiens V1-vascular vasopressin receptor AVPR1A gene, promoter region and partial cds
9180	21707		1.62	7.0E-31	BE408611.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:36383110 5'
12243	24455	30958	1.53	7.0E-31	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
3742	16343		2.28	6.0E-31	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
8094	20635		6.98	6.0E-31	AF055068.1	NT	Homo sapiens MHC class 1 region
8273	20814	33736	0.78	6.0E-31	BE350127.1	EST_HUMAN	hw09g01.x1 NCI CGAP Kid13 Homo sapiens cDNA clone IMAGE:3148256 3' similar to contains MER29.b3
10617	23149	36161	1.69	6.0E-31	AU119105.1	EST_HUMAN	MER29 repetitive element;
11835	24199	31038	3.25	6.0E-31	AW372888.1	EST_HUMAN	AU119105 HEMBA1 Homo sapiens cDNA clone HEMBA1005050 5'
11864	24898		2	6.0E-31	BE894488.1	EST_HUMAN	RC6-BT0377-091289-031-D12 BT0377 Homo sapiens cDNA
208	12897	25352	3.89	5.0E-31	M80894.1	NT	601433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918524 5'
208	12897	25353	3.89	5.0E-31	M80894.1	NT	Homo sapiens type I DNA topoisomerase gene, exon 8
8382	20922		0.75	5.0E-31	BF056540.1	EST_HUMAN	Homo sapiens type I DNA topoisomerase gene, exon 8
622	13249		2.67	4.0E-31	AJ271795.1	NT	740604.x1 NCI CGAP_G08 Homo sapiens cDNA clone IMAGE:3443478 3' similar to TR:Q13537 Q13537
1854	14442		2.42	4.0E-31	AL163280.2	NT	SIMILAR TO POGO ELEMENT. ;contains L1.1 L1 repetitive element;
2615	15367		1.02	4.0E-31	5730036	NT	Homo sapiens Xq pseudosubosomal region; segment 1/2
10427	22921	35924	0.65	4.0E-31	AF084484.1	NT	Homo sapiens chromosome 21 segment HS21C080
12008	24309		1.65	4.0E-31	AJ230125.1	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
12389	24559		1.51	4.0E-31	AB006681.1	NT	Rattus norvegicus GTP-binding protein REM2 (Rem2) mRNA, complete cds
7377	18903	32767	7.09	3.0E-31	4826853	NT	Homo sapiens GGT1 gene, exon 1
7505	20027	32891	1.62	3.0E-31	11420328	NT	Homo sapiens gene for activin receptor type IIB, complete cds
8102	20843		2.18	3.0E-31	AL163208.2	NT	Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 8 (18kD, ASH1) (NDUF88) mRNA
8500	22000	34957	14.68	3.0E-31	D14523.1	NT	Homo sapiens hypothetical protein FLJ10842 (FLJ10842), mRNA
10488	22882	35990	0.64	3.0E-31	AA421242.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C080
10510	23048	36060	2.78	3.0E-31	P11174	SWISSPROT	Horse mRNA for ferritin L-chain, complete cds
11032	23546		6.94	3.0E-31	BF096327.1	EST_HUMAN	zlu06d04.1 Scores tests. NHT Homo sapiens cDNA clone IMAGE:731047 5'
1861	14545	27102	1.52	2.0E-31	AW838171.1	EST_HUMAN	40S RIBOSOMAL PROTEIN S15 (RIG PROTEIN)
							60145831F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3862088 5'
							QV2-L10051-260300-111-003 L10051 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2255	14820	27405	1.16	2.0E-31	AI383388.1	EST_HUMAN	bp44g05.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:211672 3'
2378	14948	27522	2.08	2.0E-31	AL118245.1	EST_HUMAN	DKFZp761G1513_1 761 (synonym: hemy2) Homo sapiens cDNA clone DKFZp761G1513 5'
2485	15050	27621	3.48	2.0E-31	AA458824.1	EST_HUMAN	aa88f11.s1 Strabagene fetal retina 637202 Homo sapiens cDNA clone IMAGE:838413 3' similar to contains THR12 THR repetitive element;
5479	18113	30522	0.81	2.0E-31	AW444498.1	EST_HUMAN	UHH-B13-akb-f09-0-U1.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2733833 3'
5888	18511	31237	2.97	2.0E-31	BE350127.1	EST_HUMAN	h08g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146258 3' similar to contains MER28.b3 MER29 repetitive element;
8008	21543		2.32	2.0E-31	AA877764.1	EST_HUMAN	nr0804.s1 NCI_CGAP_Cot10 Homo sapiens cDNA clone IMAGE:1161055 3' similar to TR:Q13537 Q13537 MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE.;
9134	21688	34811	3.65	2.0E-31	7681535	NT	Homo sapiens B9 protein (B9), mRNA
9820	22318	35301	1.04	2.0E-31	AV710948.1	EST_HUMAN	AV710948 Cu Homo sapiens cDNA clone CUAALB07 5'
9820	22318	35302	1.04	2.0E-31	AV710948.1	EST_HUMAN	AV710948 Cu Homo sapiens cDNA clone CUAALB07 5'
9887	22482	35407	1.73	2.0E-31	BE408611.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
9887	22482	35468	1.73	2.0E-31	BE408611.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
11834	24288		3.08	2.0E-31	AF148512.1	NT	Homo sapiens hexokinase II gene, promoter region
12078	25106		2.43	2.0E-31	AI114527.1	EST_HUMAN	HA1110 Human fetal liver cDNA library Homo sapiens cDNA
18	12697	25154	8.8	1.0E-31	U93163.1	NT	Homo sapiens MAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds
1703	14288	26831	3.28	1.0E-31	O95371	SWISSPROT	OLFACTORY RECEPTOR 2C1
1703	14288	26832	3.28	1.0E-31	O95371	SWISSPROT	OLFACTORY RECEPTOR 2C1
1703	14288	26833	3.28	1.0E-31	O95371	SWISSPROT	OLFACTORY RECEPTOR 2C1
4742	17323	29763	1.19	1.0E-31	AL134378.1	EST_HUMAN	DKFZp547B235_1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547B235 5'
4742	17323	29764	1.19	1.0E-31	AL134378.1	EST_HUMAN	DKFZp547B235_1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547B235 5'
6488	18130	30538	3.47	1.0E-31	AW391679.1	EST_HUMAN	MR3-ST0220-151289-028-a08_1 ST0220 Homo sapiens cDNA
6282	18880	31658	1.84	1.0E-31	AF048727.1	NT	Homo sapiens minisatellite cab1 repeat region
7332	19859	32722	0.84	1.0E-31	AF128145.1	NT	Bos taurus xenobiotic/medium-chain fatty acid:CoA ligase form XL-III mRNA, nuclear mRNA encoding mitochondrial protein, complete cds
7772	20281	33178	0.68	1.0E-31	BE972818.1	EST_HUMAN	601652052F1 NIH_MGC_82 Homo sapiens cDNA clone IMAGE:3935283 5'
10135	22830	35618	0.67	1.0E-31	U93163.1	NT	Homo sapiens MAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds
10786	23319	36329	2.84	1.0E-31	A088434.1	EST_HUMAN	q21h03.x1 NCI_CGAP_Brm25 Homo sapiens cDNA clone IMAGE:1750708 3' similar to TR:Q16595
6749	19342	32149	2.29	9.0E-32	AV723978.1	EST_HUMAN	Q16595 FRATAxin.;
7591	20106		1.07	9.0E-32	11430822	NT	AV723978 HTB Homo sapiens cDNA clone HTBAAG01 5'
							Homo sapiens hypothetical protein FLJ11294 (FLJ11294), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2122	14700	27270	3.49	8.0E-32	A056770.1	EST_HUMAN	act15a09.x1 Soares_fetal_liver_apoen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1675384 3'
5673	18300	30781	0.9	8.0E-32	AW997214.1	EST_HUMAN	RC2-BN0048-200300-015-e04 BN0048 Homo sapiens cDNA
4985	17559	30002	3.89	7.0E-32	P52591	SWISSPROT	NUCLEAR ENVELOPE PORE MEMBRANE PROTEIN POM 121 (PORE MEMBRANE PROTEIN OF 121 KD) (P145)
11909	24247		3.42	7.0E-32	X17283.1	NT	Human chromosome 22 immunoglobulin V(K) gene, part with 5' breakpoint between orphion and neighbouring non-amplified region
2759	16314	27980	0.91	6.0E-32	A1478104.1	EST_HUMAN	hm34a10.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2169894 3' similar to contains MER28.13
7402	19927		1.37	6.0E-32	BE888016.1	EST_HUMAN	MER28 repetitive element;
12350	25086		1.51	6.0E-32	AA894653.1	EST_HUMAN	601511530F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913087 5'
1072	13677	26187	75.93	5.0E-32	AF110627.1	NT	ch37cd3.s1 NCI_CGAP_Kid8 Homo sapiens cDNA clone IMAGE:1459972 3' similar to contains L1.13 L1 repetitive element;
988	13577		1.55	4.0E-32	AL163246.2	NT	Homo sapiens PRO1181 mRNA, complete cds
7598	20112	32987	3.11	4.0E-32	11432574	NT	Homo sapiens chromosome 21 segment HS21C048
7599	20112	32988	3.11	4.0E-32	11432574	NT	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
8300	20841		0.77	4.0E-32	BE094410.1	EST_HUMAN	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
481	13114	25604	2.79	3.0E-32	Y17293.1	NT	RC4-BT0311-141198-011-h08 BT0311 Homo sapiens cDNA
1502	14094	28633	8.08	3.0E-32	AV731500.1	EST_HUMAN	Homo sapiens FLI-1 gene, partial
2833	15549	28025	0.73	3.0E-32	5174574	NT	AV731500 HTF Homo sapiens cDNA clone HTFAK007 5'
2833	15549	28026	0.73	3.0E-32	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
9315	21828	34780	16.81	3.0E-32	AV758634.1	EST_HUMAN	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
9315	21828	34781	16.81	3.0E-32	AV758634.1	EST_HUMAN	AV758634 BM Homo sapiens cDNA clone BMFBFBH12 5'
10805	23326	36339	7.7	3.0E-32	AA777621.1	EST_HUMAN	AV758634 BM Homo sapiens cDNA clone BMFBFBH12 5'
11093	23605		1.83	3.0E-32	BF035327.1	EST_HUMAN	z85a07.s1 Soares_fetal_liver_apoen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:448500 3' similar to contains THR13 THR repetitive element;
11837	24270		6.37	3.0E-32	BE278086.1	EST_HUMAN	601459531F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3862088 5'
12325	15549	28025	6.28	3.0E-32	5174574	NT	601158285F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139701 5'
12325	15549	28026	6.28	3.0E-32	5174574	NT	601158285F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139701 5'
12491	24620		5.38	3.0E-32	BE2790986.1	EST_HUMAN	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
6011	17584	30027	1.01	2.0E-32	BE298813.1	EST_HUMAN	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6400	18003	31781	0.9	2.0E-32	M55418.1	NT	Human cell 12-lipoxygenase mRNA, complete cds
6805	18202	32007	5.69	2.0E-32	Z38133.1	NT	H. sapiens mRNA for myosin
6805	18202	32008	5.69	2.0E-32	Z38133.1	NT	H. sapiens mRNA for myosin
8220	20761	33678	2.08	2.0E-32	AA114294.1	EST_HUMAN	z168c08.r1 Strabegene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:563150 5'
8220	20761	33677	2.08	2.0E-32	AA114294.1	EST_HUMAN	z168c08.r1 Strabegene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:563150 5'
12610	24694	30859	1.41	2.0E-32	AV736449.1	EST_HUMAN	AV736449 CB Homo sapiens cDNA clone CBFBIA08 5'
12610	24694	30860	1.41	2.0E-32	AV736449.1	EST_HUMAN	AV736449 CB Homo sapiens cDNA clone CBFBIA08 5'
7115	19455	32271	6.88	1.0E-32	11439789	NT	Homo sapiens chromosome 11 open reading frame 9 (C11ORF9), mRNA
8532	21071	33991	4.88	1.0E-32	AA720574.1	EST_HUMAN	hw21g02.s1 NCI_CGAP_GC30 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR.L3
3527	16132		5.7	9.0E-33	BE327112.1	EST_HUMAN	THIR repetitive element ; WW DOMAIN BINDING PROTEIN 11. ;
6552	19150		4.1	9.0E-33	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
8723	21262	34182	2.52	9.0E-33	BF347229.1	EST_HUMAN	602021164F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156670 5'
10677	23209		6.39	9.0E-33	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
65	12744	26218	2.71	7.0E-33	5031738	NT	Homo sapiens short-chain alcohol dehydrogenase family member (HEP27) mRNA
65	12744	26220	2.71	7.0E-33	5031738	NT	Homo sapiens short-chain alcohol dehydrogenase family member (HEP27) mRNA
2208	14782	27355	1.92	7.0E-33	AI590115.1	EST_HUMAN	bt12b09.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2178809 3' similar to contains OFR.H1 OFR
2675	15233		6.6	7.0E-33	AV730058.1	EST_HUMAN	repetitive element ;
3279	15990		15.78	7.0E-33	AW971307.1	EST_HUMAN	AV730058 HTF Homo sapiens cDNA clone HTFAVE08 5'
8876	21415		1.08	7.0E-33	X54880.1	NT	EST383396 MAGE resequences, MAGL Homo sapiens cDNA
10709	23236	36249	4.73	7.0E-33	BF347229.1	EST_HUMAN	Human HLRP mRNA for leukocyte common antigen-related peptide (protein-tyrosine phosphatase) (EC
11127	23635	36878	2.53	7.0E-33	AW971598.1	EST_HUMAN	3.1.3.48)
11915	24253	31009	7.43	7.0E-33	AA601416.1	EST_HUMAN	602021164F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156670 5'
3800	18400		0.79	6.0E-33	AL163285.2	NT	EST383857 MAGE resequences, MAGL Homo sapiens cDNA
6217	18827	31569	1.11	6.0E-33	F30831.1	EST_HUMAN	no16h01.s1 NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100881 3' similar to contains L1.H1 L1
6217	18827	31600	1.11	6.0E-33	F30831.1	EST_HUMAN	repetitive element ;
8515	21054	33977	7.9	6.0E-33	J04038.1	NT	Homo sapiens chromosome 21 segment HS21C085
8636	21175	34094	4.14	6.0E-33	11429108	NT	HSPO21201 HM3 Homo sapiens cDNA clone s4000107H06
9823	22419	35393	1.73	6.0E-33	6755509	NT	HSPO21201-HM3 Homo sapiens cDNA clone s4000107H06
							Human glyceraldehyde-3-phosphate dehydrogenase (GAPDH) gene, complete cds
							Homo sapiens similar to RAD23 (S. cerevisiae) homolog B (H. sapiens) (LOC633277), mRNA
							Mus musculus SRV-box containing gene 6 (Sox6), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9923	22419	36394	1.73	6.0E-33	6755909	NT	Mus musculus SRY-box containing gene 6 (Sox6), mRNA
1814	14404		1.48	5.0E-33	BF373515.1	EST_HUMAN	QV1-FT0169-100700-271-902 FT0169 Homo sapiens cDNA
1925	14510		1.2	5.0E-33	11141894	NT	Homo sapiens solute carrier family 5 (choline transporter), member 7 (SLC5A7), mRNA
1943	14527	27082	1.32	5.0E-33	4507208	NT	Homo sapiens spermidine synthase (SRM) mRNA
1943	14527	27083	1.32	5.0E-33	4507208	NT	Homo sapiens spermidine synthase (SRM) mRNA
4132	16724	28178	0.8	5.0E-33	AB014599.1	NT	Homo sapiens mRNA for KIAA0689 protein, partial cds
10147	22842	35832	0.78	5.0E-33	AW284679.1	EST_HUMAN	xq33f11.x1 NCI_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2752461 3'
10147	22842	35833	0.78	5.0E-33	AW284679.1	EST_HUMAN	xq33f11.x1 NCI_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2752461 3'
11720	24129		1.43	5.0E-33	11433063	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A), mRNA
1167	13768		1.82	4.0E-33	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
2170	14747	27316	1.67	4.0E-33	4789897	NT	Homo sapiens RAB1, member RAS oncogene family (RAB1) mRNA
2464	15031		2.24	4.0E-33	AA826621.1	EST_HUMAN	ab51b11.t1 Stragene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:944317 5' similar to
2582	15145	27713	1.92	4.0E-33	AL163210.2	NT	contains Alu repetitive element; contains MER28.b2 MER28 repetitive element ;
4581	17164	28607	1.39	4.0E-33	AW293349.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
5589	18228	30677	21.86	4.0E-33	AA053053.1	EST_HUMAN	U1H-B12-ah1-c-03-0-U1.s1 NCI_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2727149 3'
6526	19126	31919	0.76	4.0E-33	8383904	NT	z171a08.t1 Stragene cdon (#637204) Homo sapiens cDNA clone IMAGE:510038 5' similar to
6526	19126	31920	0.76	4.0E-33	8383904	NT	gb:X12671_mart HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HUMAN);
1128	13731		5.55	3.0E-33	BE350127.1	EST_HUMAN	Homo sapiens polymerase (DNA directed), alpha (POLA), mRNA
1129	13731		3.84	3.0E-33	BE350127.1	EST_HUMAN	Homo sapiens polymerase (DNA directed), alpha (POLA), mRNA
2463	15468		1.01	3.0E-33	AV647851.1	EST_HUMAN	h09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3148256 3' similar to contains MER29.b3
10336	22830	35824	1.19	3.0E-33	AA861510.1	EST_HUMAN	MER29 repetitive element ;
19	12688		0.82	2.0E-33	AI160189.1	EST_HUMAN	h09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3148256 3' similar to contains MER29.b3
109	12688		2.24	2.0E-33	AI160189.1	EST_HUMAN	MER29 repetitive element ;
1415	14008	26536	2.48	2.0E-33	AA010242.1	EST_HUMAN	AV647851 GLC Homo sapiens cDNA clone GLC8CF08 3'
1415	14008	26537	2.48	2.0E-33	AA010242.1	EST_HUMAN	ak32b12.s1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:1407847 3' similar to TR-Q13579
4510	17094		4.41	2.0E-33	BE159039.1	EST_HUMAN	Q13579 MARINER TRANSPOSASE ;
							qb07g03.x1 Scores_fetal_NbH19W Homo sapiens cDNA clone IMAGE:1705204 3' similar to
							contains OFR.t1 OFR repetitive element ;
							qb07g03.x1 Scores_fetal_NbH19W Homo sapiens cDNA clone IMAGE:1705204 3' similar to
							contains OFR.t1 OFR repetitive element ;
							z08a08.t1 Scores_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:430214 5'
							z08a08.t1 Scores_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:430214 5'
							MRO-HT0405-160300-202-408 HT0405 Homo sapiens cDNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5122	17684	30131	12.23	2.0E-33	AA626883.1	EST_HUMAN	ab51g11.1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844388 5' similar to gb:X00734_cds1 TUBULIN BETA-5 CHAIN (HUMAN);
5255	17818	30242	1.93	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
5255	17818	30243	1.93	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
6555	19153	31849	1.5	2.0E-33	AI277482.1	EST_HUMAN	gb66d01.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1860161 3'
9029	21568		2.63	2.0E-33	AI052256.1	EST_HUMAN	cc21d03.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1675973 3' similar to gb:M29536 TRANSLATIONAL INITIATION FACTOR 2 BETA SUBUNIT (HUMAN);
10497	22891	36000	0.65	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
10497	22891	36001	0.65	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
10882	23498	36525	1.8	2.0E-33	AA453647.1	EST_HUMAN	zc4805.e1 Soares_beslie_NHT Homo sapiens cDNA clone IMAGE:795489 3' similar to TR:G1263081 G1263081 MARINER TRANSPOSASE.;
9	12688		1.08	1.0E-33	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
7437	19061	32827	1.21	1.0E-33	M13976.1	NT	Homo sapiens protein kinase C beta-II type (PRKCB1) mRNA, complete cds
9834	25128		0.62	1.0E-33	U60822.1	NT	Human dystrophin (DMD) gene, exons 7, 8 and 9, and partial cds
11202	23707	36759	2.63	1.0E-33	AW698818.1	EST_HUMAN	QV3-BN0047-230200-102-503 BN0047 Homo sapiens cDNA
11515	23983	37033	5.83	1.0E-33	U60822.1	NT	Human dystrophin (DMD) gene, exons 7, 8 and 9, and partial cds
12214	24437		1.8	1.0E-33	AI827191.1	EST_HUMAN	wc88-06.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2482410 3'
12403	12688		2.81	1.0E-33	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
12434	24575	30913	2.55	1.0E-33	AV727809.1	EST_HUMAN	AV727809 HTC Homo sapiens cDNA clone HTCCNC12 5'
12628	24706		4.56	9.0E-34	AI271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
1494	14088	26828	2.3	7.0E-34	T70845.1	EST_HUMAN	yd15a05.r1 Soares_fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:108320 5'
9911	14088	26828	0.66	7.0E-34	T70845.1	EST_HUMAN	yd15a05.r1 Soares_fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:108320 5'
11889	24289		1.75	7.0E-34	H12896.1	EST_HUMAN	y14c10.r1 Soares_placenta_Nb2-P Homo sapiens cDNA clone IMAGE:148722 5'
496	13128	25616	1.61	6.0E-34	U10991.1	NT	Human G2 protein mRNA, partial cds
496	13128	25617	1.61	6.0E-34	U10991.1	NT	Human G2 protein mRNA, partial cds
11797	24177	31028	1.92	6.0E-34	U03686.1	NT	Mus musculus DAB/2J hair-specific (hac-1) gene
1823	14508		2.5	5.0E-34	7706500	NT	Homo sapiens Npw38-binding protein NpwBP (LOC51729), mRNA
5218	17783	30201	6.85	5.0E-34	U30983.1	NT	Human splicing factor SFQ65-1 (SRP-55) mRNA, complete cds
8800	21339	34266	1.18	5.0E-34	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
10534	23071	36084	2.26	5.0E-34	AB037856.1	NT	Homo sapiens mRNA for KIAA1435 protein, partial cds
11133	23841		1.9	5.0E-34	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
2041	14623	27182	3.42	4.0E-34	AB04667.1	EST_HUMAN	tt94-08.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2249194 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2745	15300	27868	1.06	4.0E-34	8922807	NT	Homo sapiens hypothetical protein FLJ10989 (FLJ10989), mRNA
8968	21506	34427	1.35	4.0E-34	BF209778.1	EST_HUMAN	601874950F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4102213 5'
8379	18983	31763	1.13	3.0E-34	M37277.1	NT	Human Ig germline H-chain D-region genes, partial cds
11031	23545		5.04	3.0E-34	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3862088 5'
8881	21419	34343	1.87	2.0E-34	A1878101.1	EST_HUMAN	wd35g06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330170 3' similar to contains MER29.12 MER29 repetitive element;
8881	21419	34344	1.87	2.0E-34	A1878101.1	EST_HUMAN	wd35g06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330170 3' similar to contains MER29.12 MER29 repetitive element;
1552	14144	26878	7.44	1.0E-34	P12238	SWISSPROT	ADP-ATP CARRIER PROTEIN, LIVER ISOFORM T2 (ADP/ATP TRANSLOCASE 3) (ADENINE NUCLEOTIDE TRANSLOCATOR 3) (ANT 3)
3798	16337	28802	1.24	1.0E-34	AF003528.1	NT	Homo sapiens X-linked ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
4145	16737	29180	0.82	1.0E-34	AY008397.1	NT	Homo sapiens WNT3 precursor (WNT3) mRNA, complete cds
4145	16737	29181	0.82	1.0E-34	AY008397.1	NT	Homo sapiens WNT3 precursor (WNT3) mRNA, complete cds
4578	17161		8.22	1.0E-34	BE071414.1	EST_HUMAN	RC2-BT0506-240400-016-H08 BT0506 Homo sapiens cDNA
6287	18895	31864	2.89	1.0E-34	BE874052.1	EST_HUMAN	601484430F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3868989 5'
8287	18895	31865	2.89	1.0E-34	BE874052.1	EST_HUMAN	601484430F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3868989 5'
9813	22113	35078	17.45	1.0E-34	AL036635.1	EST_HUMAN	DKFZp564A1563_1 584 (synonym: hibr2) Homo sapiens cDNA clone DKFZp564A1563 5'
11077	23589	36627	1.94	1.0E-34	11439569	NT	Homo sapiens nucleobindin 2 (NUCB2), mRNA
12178	25037		3.1	1.0E-34	AA807097.1	EST_HUMAN	cc31c11.x1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1351316 3' similar to gb:X68203 TYROSINE-PROTEIN KINASE RECEPTOR FLT4 PRECURSOR (HUMAN);
12423	24608		4.82	1.0E-34	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
3707	16308	28776	1.45	9.0E-35	AW683302.1	EST_HUMAN	hh77608.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2868787 5'
243	12802		10.87	8.0E-35	6031190	NT	Homo sapiens prohibitin (PHB) mRNA
1772	14382	26907	2.03	8.0E-35	BF586637.1	EST_HUMAN	nae33a08.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3258134 3' similar to TR:O75912 O75912 DIACYLGLYCEROL KINASE IOTA;
1772	14382	26908	2.03	8.0E-35	BF586637.1	EST_HUMAN	nae33a08.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3258134 3' similar to TR:O75912 O75912 DIACYLGLYCEROL KINASE IOTA;
4891	17565	30010	3.45	8.0E-35	BF183195.1	EST_HUMAN	601806588F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040324 5'
10570	23105	38120	1.8	8.0E-35	BE378480.1	EST_HUMAN	601238488F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608513 5'
11907	24245		2.96	8.0E-35	BF568282.1	EST_HUMAN	602184624T1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300860 3'
8610	19207	32015	2	7.0E-35	11425417	NT	Homo sapiens phosphatidylinositol glycan, class L (PIGL), mRNA
1458	14050	26582	1.08	8.0E-35	AA757115.1	EST_HUMAN	ah53i03.at Soares_testis_NHT Homo sapiens cDNA clone 1305397 3'
2010	14582	27182	1.29	8.0E-35	6005975	NT	Homo sapiens zinc finger protein 208 (ZNF208), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4127	18719	29174	0.67	6.0E-35	AW297191.1	EST_HUMAN	U1H-BWD-epd-4-09-0-UI.s1 NCL_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:2791433 3'
7838	20380	33285	3.41	6.0E-35	6005821	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
8843	21182	34101	0.49	6.0E-35	X94232.1	NT	H. sapiens mRNA for novel T-cell activation protein
8843	21182	34102	0.49	6.0E-35	X94232.1	NT	H. sapiens mRNA for novel T-cell activation protein
9584	22084	35048	0.7	6.0E-35	AB002364.1	NT	Human mRNA for KIAA0368 gene, partial cds
9817	22315	35286	2.42	6.0E-35	AB037786.1	NT	Homo sapiens mRNA for KIAA1365 protein, partial cds
152	12815	25303	37.67	5.0E-35	AF154830.1	NT	Homo sapiens carboxyl phosphate synthetase 1 mRNA, complete cds
1747	14337	28883	1.28	5.0E-35	X63392.1	NT	H. sapiens immunoglobulin kappa light chain variable region L14
3043	15659	28139	1.39	5.0E-35	6812639	NT	Homo sapiens Ring1 and YY1 binding protein (RYBP), mRNA
4489	17083	29533	1.81	5.0E-35	AF023288.1	NT	Homo sapiens cdk2 kinase (CLK2), pppin1, cdk1, glucocorticoidase (GBA), and melanin genes, complete cds; metadaxin pseudogene and glucocorticoidase pseudogene; and thrombospondin3 (THBS3) gene, partial cds
8125	20668		3.51	5.0E-35	BE600992.1	EST_HUMAN	601431984F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917229 5'
8151	20882	33608	2.29	5.0E-35	AI208765.1	EST_HUMAN	qg38c05.x1 Scores: testis_NHT Homo sapiens cDNA clone IMAGE:1837448 3' similar to SW:Y249_HUMAN Q82539 HYPOTHETICAL PROTEIN KIAA0249 ;
8151	20882	33607	2.29	5.0E-35	AI208765.1	EST_HUMAN	qg38c05.x1 Scores: testis_NHT Homo sapiens cDNA clone IMAGE:1837448 3' similar to SW:Y249_HUMAN Q82539 HYPOTHETICAL PROTEIN KIAA0249 ;
11056	23568		3.53	5.0E-35	AA001786.1	EST_HUMAN	zn84f12.r1 Scores: fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:428015 5'
1481	14074	28613	13.95	4.0E-35	BE257907.1	EST_HUMAN	601109719F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350405 5'
1855	14443	28899	4.12	4.0E-35	H81183.1	EST_HUMAN	y488a07.r1 Scores: fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:241236 5' similar to contains PTR5 repetitive element ;
4927	17502		0.58	4.0E-35	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
7280	19788		2.08	4.0E-35	BE350127.1	EST_HUMAN	h09g01.x1 NCL_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146258 3' similar to contains MER29.b3 MER29 repetitive element ;
8455	20895	33913	6.88	4.0E-35	AL046586.1	EST_HUMAN	DKFZp434L148_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L148 5'
1823	14218	28748	31.49	3.0E-35	BE288182.1	EST_HUMAN	601125280F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3345063 5'
2369	14940		2.22	3.0E-35	AF224482.1	NT	Homo sapiens phospholipid scramblase 1 gene, complete cds
5543	18175	30589	22.73	3.0E-35	BF433100.1	EST_HUMAN	7n25a09.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3565361 3' similar to TR:Q8QZH7
5543	18175	30590	22.73	3.0E-35	BF433100.1	EST_HUMAN	7n25a09.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3565361 3' similar to TR:Q8QZH7
9409	21918		1.72	3.0E-35	AF223391.1	NT	Q8QZH7 F-BOX PROTEIN FBL2 ; Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10078	22573	35568	0.8	3.0E-35	AW003063.1	EST_HUMAN	wr03a05.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2480432 3' similar to SW:POL.1_HUMAN P10266 RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ;
113	15407	25268	1.18	2.0E-35	N88865.1	EST_HUMAN	K6932F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K6932 5' similar to REPETITIVE ELEMENT
1230	13828	28344	1.13	2.0E-35	T11908.1	EST_HUMAN	A971F Heart Homo sapiens cDNA clone A971
2259	14833	27411	4.88	2.0E-35	AB018413.1	NT	Homo sapiens mRNA for Gab2, complete cds
3353	15981	28437	0.79	2.0E-35	6812459	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
3353	15981	28438	0.79	2.0E-35	6812459	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
3613	16216		0.85	2.0E-35	AB020702.1	NT	Homo sapiens mRNA for KIAA0895 protein, partial cds
3981	16579	29049	0.86	2.0E-35	BE247575.1	EST_HUMAN	TCBAP2E4328 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4328
3981	16579	29050	0.86	2.0E-35	BE247575.1	EST_HUMAN	TCBAP2E4328 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4328
4777	17358		2.89	2.0E-35	H48239.1	EST_HUMAN	Yq19a12.1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:274079 5'
5770	18396	31110	1.48	2.0E-35	BF332417.1	EST_HUMAN	QV0-BT0701-270400-189-b04 BT0701 Homo sapiens cDNA
10875	23207	36219	4.14	2.0E-35	X59417.1	NT	H.sapiens PROS-27 mRNA
11663	15961	28437	1.34	2.0E-35	6812459	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
11663	15961	28438	1.34	2.0E-35	6812459	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
12405	24563		42.99	2.0E-35	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
12525	15407	25269	1.4	2.0E-35	N88865.1	EST_HUMAN	K6932F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K6932 5' similar to REPETITIVE ELEMENT
50	12730	25194	5.95	1.0E-35	AA631949.1	EST_HUMAN	fmfr16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
60	12730	25195	5.95	1.0E-35	AA631949.1	EST_HUMAN	fmfr16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
782	13401	25903	55.23	1.0E-35	AW389473.1	EST_HUMAN	IL2-ST0162-131099-006-d12 ST0162 Homo sapiens cDNA
782	13401	25904	55.23	1.0E-35	AW389473.1	EST_HUMAN	IL2-ST0162-131099-006-d12 ST0162 Homo sapiens cDNA
942	13555		1.15	1.0E-35	T87947.1	EST_HUMAN	Yd83a01.1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:115752 5' similar to SP-A44282 A44282 RETROVIRUS-RELATED POL POLYPROTEIN - HUMAN ;
2578	15141	27710	1.98	1.0E-35	7705894	NT	Homo sapiens hypothetical protein (LOC51233), mRNA
2795	15348	27917	1.36	1.0E-35	BE350127.1	EST_HUMAN	h08g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER28.b3 MER28 repetitive element ;
2795	15348	27918	1.36	1.0E-35	BE350127.1	EST_HUMAN	h08g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER28.b3 MER28 repetitive element ;
3177	15790	28262	1.03	1.0E-35	6006030	NT	Homo sapiens transcription elongation factor B (SIII), polypeptide 1-like (TCBEB1L) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3189	15811	28284	1.52	1.0E-35	AV650422.1	EST_HUMAN	AV650422 GLC Homo sapiens cDNA clone GLOCF08 3'
3189	15811	28285	1.52	1.0E-35	AV650422.1	EST_HUMAN	AV650422 GLC Homo sapiens cDNA clone GLOCF08 3'
4513	17097	29543	5.19	1.0E-35	7856805	NT	Mus musculus actin receptor interacting protein 1 (Arip1-pending), mRNA
4513	17097	29544	5.19	1.0E-35	7856805	NT	Mus musculus actin receptor interacting protein 1 (Arip1-pending), mRNA
5701	18327	30831	1.31	1.0E-35	11528238	NT	Homo sapiens chromatin assembly factor 1, subunit B (p80) (CHAF1B), mRNA
7069	18088	30444	0.73	1.0E-35	AW808865.1	EST_HUMAN	MIR1-ST0111-111189-011-d07 ST0111 Homo sapiens cDNA
7069	18088	30445	0.73	1.0E-35	AW808865.1	EST_HUMAN	MIR1-ST0111-111189-011-d07 ST0111 Homo sapiens cDNA
7499	20019	32883	0.8	1.0E-35	AB033105.1	NT	Homo sapiens mRNA for KIAA1279 protein, partial cds
7837	20149	33033	0.98	1.0E-35	11418002	NT	Homo sapiens KIAA0845 gene product (KIAA0845), mRNA
9481	24794	34941	3.33	1.0E-35	AU158595.1	EST_HUMAN	AU158595 PLAGE3 Homo sapiens cDNA clone PLACE3000382 3'
9481	24794	34942	3.33	1.0E-35	AU158595.1	EST_HUMAN	AU158595 PLAGE3 Homo sapiens cDNA clone PLACE3000382 3'
10470	22864	35974	0.57	1.0E-35	BF589594.1	EST_HUMAN	nas06d08.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:3254051 3' similar to TR:031341
10470	22864	35975	0.57	1.0E-35	BF589594.1	EST_HUMAN	nas06d08.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:3254051 3' similar to TR:031341
11601	24044		4.48	1.0E-35	AE25119.1	EST_HUMAN	promins-7.D01.r b1umor Homo sapiens cDNA 5'
11695	24988		1.3	1.0E-35	11418274	NT	Homo sapiens fibulin 1 (FBLN1), mRNA
12287	24489		1.87	1.0E-35	BE782832.1	EST_HUMAN	601584833F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3938885 5'
9158	21681	34635	0.51	8.0E-38	AA348480.1	EST_HUMAN	EST54938 Hippocampus II Homo sapiens cDNA 5' end similar to endogenous retrovirus 9, 5' LTR
10080	22555		2.13	8.0E-38	7708259	NT	Homo sapiens CGI-09 protein (LOC51605), mRNA
2857	15573	28050	1.15	7.0E-38	AW857578.1	EST_HUMAN	CM1-CT0315-081289-083-d07 CT0315 Homo sapiens cDNA
3152	15788		5.38	7.0E-38	4557498	NT	Homo sapiens C-terminal binding protein 2 (CTBP2) mRNA
7650	20182	33049	6.73	7.0E-38	U06872.1	NT	Human carcinoembryonic antigen gene family member 12 (CGM12) gene, exons L and LN
7650	20182	33050	6.73	7.0E-38	U06872.1	NT	Human carcinoembryonic antigen gene family member 12 (CGM12) gene, exons L and LN
12070	24350	30865	5.15	7.0E-38	AF052051.1	NT	Homo sapiens glutathione transferase A4 gene, exon 1
2048	14830	27189	2.5	6.0E-38	7706822	NT	Homo sapiens hnjurn 2 (NINL2), mRNA
2461	15028		5.35	6.0E-38	AB033346.1	NT	Homo sapiens TGLB gene, exon 12
3701	16302	28770	0.98	6.0E-38	BF515101.1	EST_HUMAN	UI-H-BW1-arn-c-12-Q-J1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083542 3'
5534	18168	30580	0.75	8.0E-38	AK35169.1	EST_HUMAN	th83b06.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2128195 3' similar to gb:M11949 PANCREATIC SECRETORY TRYPSIN INHIBITOR PRECURSOR (HUMAN);
7163	19695	32541	3.97	6.0E-38	AW780143.1	EST_HUMAN	h08h02.x1 NCI_CGAP_Co14 Homo sapiens cDNA clone IMAGE:3036827 3' similar to SW:IMA2_HUMAN
8588	21125	34045	2.54	6.0E-38	AF208161.1	NT	P52282 IMPORTIN ALPHA-2 SUBUNIT ; Homo sapiens synovial precursor, mRNA, complete cds

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Table 4
Single Exon Probes Expressed In Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10125	22620		0.54	8.0E-36	C18027.1	EST_HUMAN	C18027 Clontech human acra polyA+ mRNA (#8572) Homo sapiens cDNA clone GEN-535C11 5'
11422	23873	36836	2.62	6.0E-36	A380469.1	EST_HUMAN	tf85c09.x1 NC1 CGAP CLL1 Homo sapiens cDNA clone IMAGE:2107024 3' similar to contains MER8.b2
143	12808	25286	12.3	5.0E-36	AJ271735.1	NT	MER8 repetitive element ;
2779	15332	27801	15.02	5.0E-36	BE388436.1	EST_HUMAN	Homo sapiens Xq pseudautosomal region; segment 1/2
3672	16273	28739	1.07	5.0E-36	AL163209.2	NT	601285587F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607289 5'
4903	17478	28635	1.6	5.0E-36	5728728	NT	Homo sapiens chromosome 21 segment HS21C009
4903	17478	28636	1.6	5.0E-36	5728728	NT	Homo sapiens API5-like 1 (API5L1), mRNA
11661	12808	25286	4.05	5.0E-36	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
11983	24285	31024	2.88	5.0E-36	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1287	13664	26381	2.14	4.0E-36	BE010038.1	EST_HUMAN	PM3-BN0178-100400-001-g04 BN0178 Homo sapiens cDNA
1491	14083	26624	1.88	4.0E-36	P10266	SWISSPROT	RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ;
1687	14279	26813	1.35	4.0E-36	BE382574.1	EST_HUMAN	ENDONUCLEASE
2284	14838		1.7	4.0E-36	AW247772.1	EST_HUMAN	601298574F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3628366 5'
3397	16005	28486	0.83	4.0E-36	BE388286.1	EST_HUMAN	2820020.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2820020 5'
3397	16005	28487	0.83	4.0E-36	BE388286.1	EST_HUMAN	601282266F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604168 5'
4868	17442	28683	0.57	4.0E-36	AL163204.2	NT	601282266F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604168 5'
5310	17872	30264	0.56	4.0E-36	AA905381.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C004
5882	18515		0.94	4.0E-36	R84023.1	EST_HUMAN	ok05b11.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1506809 3' similar to
6205	18815	31888	2.19	4.0E-36	11497041	NT	SW:D3H1_RAT P29288 3-HYDROXYISOBUTYRATE DEHYDROGENASE PRECURSOR ;
7649	20161	33048	1.77	4.0E-36	M33320.1	NT	y1905.r1 Soares placenta Nb21P Homo sapiens cDNA clone IMAGE:139713 5'
8490	21028	33947	1.15	4.0E-36	D87675.1	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), transcript variant 3, mRNA
8490	21029	33948	1.15	4.0E-36	D87675.1	NT	Human platelet Glycoprotein IIb (GPIIb) gene, exons 2-29
10887	23388	36403	2.36	4.0E-36	AA400370.1	EST_HUMAN	Homo sapiens DNA for amyloid precursor protein, complete cds
11881	24292		1.46	4.0E-36	11420516	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
12026	24872		6.32	4.0E-36	AV753626.1	EST_HUMAN	zu68c10.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743260 5'
725	13345	25837	2.82	3.0E-36	AF099810.1	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic 2 (NFATC2), mRNA
1545	14137	26871	1.01	3.0E-36	AF110238.1	NT	AV753629 TP Homo sapiens cDNA clone TPGBH01 5'
1545	14137	26872	1.01	3.0E-36	AF110238.1	NT	Homo sapiens neuron III-alpha gene, partial cds
2338	14909	27481	0.88	3.0E-36	7662401	NT	Homo sapiens calcium/calmodulin-stimulated cyclic nucleotide phosphodiesterase (PDE1A) gene, partial cds

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4800	17184	28631	7.38	3.0E-36	10181139	NT	Mus musculus junctophilin 1 (Jp1-pending), mRNA
10885	23489	36529	2.06	3.0E-36	BF03327.1	EST_HUMAN	601458531F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3862086 5'
3204	15816	28282	3.78	2.0E-36	BE259287.1	EST_HUMAN	601106343F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3342708 5'
5084	17687	30106	9.22	2.0E-36	AW880376.1	EST_HUMAN	QV0-OT0030-240300-174-H04 OT0030 Homo sapiens cDNA
5077	18304	30786	2.55	2.0E-36	AF287747.1	NT	Mus musculus p47-phox gene, complete cds
6012	18632	31367	4.22	2.0E-36	T08758.1	EST_HUMAN	EST08848 Infant Brain, Banto Soares Homo sapiens cDNA clone HIBBJ28 5' end
6890	19286	32089	12.01	2.0E-36	T6626.1	EST_HUMAN	yc44a07.1 Stratiens liver (#637224) Homo sapiens cDNA clone IMAGE:83508 5'
9310	21824	34772	0.86	2.0E-36	BF512784.1	EST_HUMAN	UHL-BW1-emu-e-11-Q-ULs1 NCI CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071132 3'
9468	21867	34817	0.8	2.0E-36	4507848	NT	Homo sapiens ubiquitin specific protease-13 (isopeptidase T-3) (USP13) mRNA
9468	21867	34818	0.8	2.0E-36	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
918	13531	28049	2.35	1.0E-36	BE408310.1	EST_HUMAN	601300938F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
2180	14766	27337	0.91	1.0E-36	BE146623.1	EST_HUMAN	RC1-HT0217-131189-021-H07 HT0217 Homo sapiens cDNA
2180	14766	27338	0.91	1.0E-36	BE146623.1	EST_HUMAN	RC1-HT0217-131189-021-H07 HT0217 Homo sapiens cDNA
2243	14818	27382	1.34	1.0E-36	BF673781.1	EST_HUMAN	602138483F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4272888 5'
2538	15102		1.75	1.0E-36	AW276898.1	EST_HUMAN	xp57a06.x1 NCI CGAP_Ov39 Homo sapiens cDNA clone IMAGE:2744434 3' similar to WP:C13F10.7
3388	15897		1.23	1.0E-36	AF158982.1	NT	CE08148 ;
5804	18528	31252	0.86	1.0E-36	AL044446.1	EST_HUMAN	Homo sapiens human endogenous retrovirus W proC8-19 protease (pro) gene, partial cds
8059	18876	31418	0.97	1.0E-36	4827064	NT	DKFZp434G022.1 494 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434G022 5'
6330	18836		3.97	1.0E-36	AI887714.1	EST_HUMAN	Homo sapiens zinc finger protein 147 (estrogen-responsive finger protein) (ZNF147) mRNA
6524	18124	31916	1.13	1.0E-36	R25012.1	EST_HUMAN	w637c12.x1 NCI CGAP_GC8 Homo sapiens cDNA clone IMAGE:2307882 3' similar to contains Alu repetitive element
6524	18124	31917	1.13	1.0E-36	R25012.1	EST_HUMAN	yg38g10.1 Scores Infant brain 1NIB Homo sapiens cDNA clone IMAGE:34528 5' similar to SP:CAHP_HUMAN P35219 CARBONIC ANHYDRASE-RELATED PROTEIN ;
6783	18374	32180	0.7	1.0E-36	AL120542.1	EST_HUMAN	yg38g10.1 Scores Infant brain 1NIB Homo sapiens cDNA clone IMAGE:34528 5' similar to SP:CAHP_HUMAN P35219 CARBONIC ANHYDRASE-RELATED PROTEIN ;
7801	20443	33347	3.18	1.0E-36	AA148034.1	EST_HUMAN	DKFZp761A228.1 761 (synonym: harny2) Homo sapiens cDNA clone DKFZp761A228 5'
7901	20443	33348	3.18	1.0E-36	AA148034.1	EST_HUMAN	zd51a12.1 Stratiens endothelial cell 637223 Homo sapiens cDNA clone IMAGE:560398 5'
7997	20539	33441	1.22	1.0E-36	AA420467.1	EST_HUMAN	zd51a12.1 Stratiens endothelial cell 637223 Homo sapiens cDNA clone IMAGE:560398 5'
7997	20539	33442	1.22	1.0E-36	AA420467.1	EST_HUMAN	nc60a08.1 NCI CGAP_P1 Homo sapiens cDNA clone IMAGE:745670
8120	20661	33570	0.73	1.0E-36	AA141688.1	EST_HUMAN	nc60a08.1 NCI CGAP_P1 Homo sapiens cDNA clone IMAGE:745670
8120	20661	33571	0.73	1.0E-36	AA141688.1	EST_HUMAN	AU141888 THYROT1 Homo sapiens cDNA clone THYROT1001033 5'
8859	21497	34420	2.88	1.0E-36	AW103658.1	EST_HUMAN	AU141888 THYROT1 Homo sapiens cDNA clone THYROT1001033 5'
10023	22518	35513	3.89	1.0E-36	BF364169.1	EST_HUMAN	xp82b07.x1 NCI CGAP_Bm35 Homo sapiens cDNA clone IMAGE:2614357 3'
							QV3-NN1023-010800-189-H01 NN1023 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10231	22728	35717	0.71	1.0E-36	AW855888.1	EST_HUMAN	RC3-CT0279-040500-017-a10 CT0279 Homo sapiens cDNA
10231	22728	35718	0.71	1.0E-36	AW855888.1	EST_HUMAN	RC3-CT0279-040500-017-a10 CT0279 Homo sapiens cDNA
10828	23347	36383	3.55	1.0E-36	AW897638.1	EST_HUMAN	CM3-NN0061-140400-147-h12 NN0061 Homo sapiens cDNA
11258	23788	36844	4.94	1.0E-36	AW504143.1	EST_HUMAN	U1HF-BNO-ale-c-03-Q-UL1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079277 5'
11848	24208		6.11	1.0E-36	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12316	24507		6.19	1.0E-36	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
12592	24683		3.59	1.0E-36	AF202723.1	NT	Homo sapiens Sed1 unc-84 domain protein 2 (SUN2) mRNA, partial cds
7415	19940	32804	1.94	9.0E-37	AW008277.1	EST_HUMAN	ws80b07.x1 NCI_CGAP_Cc3 Homo sapiens cDNA clone IMAGE:2504245 3'
7415	19940	32805	1.94	9.0E-37	AW008277.1	EST_HUMAN	ws80b07.x1 NCI_CGAP_Cc3 Homo sapiens cDNA clone IMAGE:2504245 3'
12113	24374		1.63	9.0E-37	W22618.1	EST_HUMAN	73D4 Human retina cDNA Tap5001-cleaned sublibrary Homo sapiens cDNA not directional
3308	18008	28488	1.01	8.0E-37	4757879	NT	Homo sapiens chimera (chimerin) 2 (CHN2) mRNA
5458	18091		1.58	8.0E-37	BE898077.1	EST_HUMAN	CM0-UT0003-050800-503-d08 UT0003 Homo sapiens cDNA
5684	18614	31348	4.02	8.0E-37	BE350127.1	EST_HUMAN	h08g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3
5684	18614	31349	4.02	8.0E-37	BE350127.1	EST_HUMAN	MER29 repetitive element;
6037	18656	31368	6.7	8.0E-37	AW840840.1	EST_HUMAN	h08g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3
7825	20367	33275	6.31	8.0E-37	X87344.1	NT	MER29 repetitive element;
1328	13922		2.3	7.0E-37	AL042800.1	EST_HUMAN	RC1-CN0008-210100-012-d09_1 CN0008 Homo sapiens cDNA
1780	14370	26914	1.55	7.0E-37	AF111107.2	NT	H. sapiens DMA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DOB2 and RING8, 9, 13 and 14 genes
1780	14370	26915	1.55	7.0E-37	AF111107.2	NT	DKFZp434E0422_1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434E0422 5'
10637	23168	36180	7.76	7.0E-37	A1817700.1	EST_HUMAN	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
10774	23286	36303	3.74	7.0E-37	A1536702.1	EST_HUMAN	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
5304	17806		2.5	6.0E-37	R10039.1	EST_HUMAN	wk25b11.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2413341 3' similar to contains PTR5.12
8377	20917	33837	0.54	6.0E-37	AF160689.1	NT	PTR5 repetitive element;
12455	24598		3.85	6.0E-37	AF202723.1	NT	hm87g03.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2165140 3' similar to contains L1.b3 L1
6243	18652	31622	4.92	5.0E-37	AA307123.1	EST_HUMAN	repetitive element;
6243	18652	31623	4.92	5.0E-37	AA307123.1	EST_HUMAN	Y25a02.11 Scores fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:127850 5'
8691	21230	34150	0.85	5.0E-37	AV750211.1	EST_HUMAN	Homo sapiens protocadherin alpha 10 alternate isoform (PCDH-alpha10) mRNA, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10800	23323		4.94	5.0E-37	7657117	NT	Homo sapiens glycine C-acetyltransferase (2-amin-3-ketobutyrate-CoA ligase) (GCAT), mRNA
11843	24205		5.21	5.0E-37	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
2468	15035	27602	1.7	4.0E-37	AA702794.1	EST_HUMAN	260604.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:448015 3'
9278	21804	34755	0.68	4.0E-37	AA843808.1	EST_HUMAN	el09c02.s1 Soares_papillary_tumor_NibHPA Homo sapiens cDNA clone IMAGE:1405442 3'
10812	23431	36451	1.74	4.0E-37	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
10812	23431	36452	1.74	4.0E-37	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
2061	14841	27215	2.58	3.0E-37	AL048856.1	EST_HUMAN	DKFZp434L2418_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434L2418
2061	14841	27216	2.58	3.0E-37	AL048856.1	EST_HUMAN	DKFZp434L2418_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434L2418
2882	15608		3.5	3.0E-37	AW961150.1	EST_HUMAN	EST1373222 IMAGE resequences, MAGF Homo sapiens cDNA
5128	17688		0.79	3.0E-37	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC 68 Homo sapiens cDNA clone IMAGE:3862086 5'
7557	20075	32851	0.79	3.0E-37	AJ749862.1	EST_HUMAN	cd4c05.x1 Barstead colon HPLRBT Homo sapiens cDNA clone IMAGE:2373888 3' similar to TRCQ19537
404	13079	25571	0.9	2.0E-37	D89790.1	NT	Q13537 SIMILAR TO POGO ELEMENT ;
404	13079	25572	0.9	2.0E-37	D89790.1	NT	Homo sapiens mRNA for AML1, complete cds
1119	13722	26234	2.1	2.0E-37	AU131202.1	EST_HUMAN	Homo sapiens mRNA for AML1, complete cds
1119	13722	26235	2.1	2.0E-37	AU131202.1	EST_HUMAN	AU131202 NT2RP3 Homo sapiens cDNA clone NT2RP3002166 5'
2008	14588	27148	1.45	2.0E-37	AL163247.2	NT	AU131202 NT2RP3 Homo sapiens cDNA clone NT2RP3002166 5'
3982	16560	28029	6.99	2.0E-37		NT	Homo sapiens chromosome 21 segment HS21C047
4330	16917	26360	0.59	2.0E-37	4826885	NT	Homo sapiens cytochrome P450, subfamily XXVIA (steroid 27-hydroxylase, cerebrotendinous xanthomatosis), polypeptide 1 (CYP27A1b) mRNA
6765	18358	32167	3.94	2.0E-37	AA346720.1	EST_HUMAN	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp-His) box polypeptide 1 (DDX1) mRNA
7838	20480	33390	0.53	2.0E-37	BE537784.1	EST_HUMAN	EST52831 Fetal heart II Homo sapiens cDNA 5' end
7838	20480	33391	0.53	2.0E-37	BE537784.1	EST_HUMAN	601067934F1 NIH_MGC 10 Homo sapiens cDNA clone IMAGE:3453657 5'
7881	20523	33429	2.75	2.0E-37	BF204032.1	EST_HUMAN	601067934F1 NIH_MGC 10 Homo sapiens cDNA clone IMAGE:3453657 5'
11434	23884	36851	19.39	2.0E-37	AF176013.1	NT	601889157F1 NIH_MGC 17 Homo sapiens cDNA clone IMAGE:4111408 5'
12633	24710		5.1	2.0E-37	11417672	NT	Homo sapiens J domain containing protein 1 isoform b (JDP1) mRNA, complete cds
2135	14713	27286	2.49	1.0E-37	AL163281.2	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
3231	15843		0.98	1.0E-37	AW862082.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C081
4243	16831	26282	0.06	1.0E-37	BE872365.1	EST_HUMAN	RC3-CT0347-210400-016-h03 CT0347 Homo sapiens cDNA
5075	17648	30089	3.67	1.0E-37	BF371719.1	EST_HUMAN	601448610F1 NIH_MGC 65 Homo sapiens cDNA clone IMAGE:3852652 5'
6155	18768		0.8	1.0E-37	7305360	NT	QV0-FR0180-280700-318-c10 FR0180 Homo sapiens cDNA
8156	20687	33610	0.84	1.0E-37	BE546032.1	EST_HUMAN	Mus musculus otogelin (Otog), mRNA
8670	21209	34127	3.03	1.0E-37	AA171406.1	EST_HUMAN	601072410F1 NIH_MGC 12 Homo sapiens cDNA clone IMAGE:3456308 5'
							zp21b02.r1 Stratiogene neuroepithelium (#837231) Homo sapiens cDNA clone IMAGE:610059 5' similar to contains L1.12 L1 repetitive element ;

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10577	23112	36126	5.51	1.0E-37	M22878.1	NT	Human somatic cytochrome c (HC1) processed pseudogene, complete cds
12167	24408		3.8	1.0E-37	BE771814.1	EST_HUMAN	CM3-FT0098-140700-243-d07 FT0098 Homo sapiens cDNA
5950	18571	31303	1.71	9.0E-38	10048482	NT	Rattus norvegicus multidomain presynaptic cytomatrix protein Piccolo (LOC56788), mRNA
1264	13861	26378	2.05	8.0E-38	11438955	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
2543	15107	27680	1.49	8.0E-38	BF346221.1	EST_HUMAN	602018401F1 NCJ_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4153982 5'
12231	13861	26378	1.62	8.0E-38	11438955	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
4307	18883	26338	0.63	7.0E-38	H19092.1	EST_HUMAN	yn51807.1 Soares adult brain N2b5HB55Y Homo sapiens cDNA clone IMAGE:171973 5'
3078	15683	28167	2.75	6.0E-38	BF033033.1	EST_HUMAN	601455722F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3858348 5'
5776	18401	31118	1.34	6.0E-38	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
5776	18401	31117	1.34	6.0E-38	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
11898	24110		10.47	6.0E-38	11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (G12ORF3), mRNA
12201	24427	30952	14.11	6.0E-38	AB002058.1	NT	Homo sapiens DNA for Human P204, complete cds
12614	24637	30767	1.7	6.0E-38	11418184	NT	Homo sapiens adenylosuccinate lyase (ADSL), mRNA
756	13375	25670	1.29	5.0E-38	AW971818.1	EST_HUMAN	EST383908 MAGE resequences, MAGL Homo sapiens cDNA
2485	15058	27633	1.94	5.0E-38	AJ237740.1	NT	Homo sapiens RIBLIR gene (partial), exon 8
7096	19687	32506	2.15	5.0E-38	BE871610.1	EST_HUMAN	601450148F1 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:3854074 5'
124	12783	25277	3.63	4.0E-38	Z25468.1	NT	B. taurus mitochondrial aspartate aminotransferase mRNA, complete CDS
124	12783	25278	3.63	4.0E-38	Z25468.1	NT	B. taurus mitochondrial aspartate aminotransferase mRNA, complete CDS
1189	13800	26312	1.05	3.0E-38	11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (G12ORF3), mRNA
2148	14725		2.39	3.0E-38	AF003530.1	NT	Homo sapiens homeobox protein CUX4 (CUX4) gene, complete cds and flanking repeat regions
3758	16390		1.37	3.0E-38	7548807	NT	Homo sapiens HIRA interacting protein 4 (hira-like) (HIRIP4), mRNA
3922	16520	28987	2.12	3.0E-38	P53538	SWISSPROT	SSU72 PROTEIN
3922	16520	28988	2.12	3.0E-38	P53538	SWISSPROT	SSU72 PROTEIN
4721	17302		0.66	3.0E-38	BE276301.1	EST_HUMAN	601157633F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3504272 5'
6850	24772	32254	7.24	3.0E-38	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
7688	20103	32978	6.83	3.0E-38	BF373684.1	EST_HUMAN	CM3-FT0181-140700-241-d07 FT0181 Homo sapiens cDNA
8594	21123	34043	2.01	3.0E-38	H85494.1	EST_HUMAN	y488b04.1 Soares melanocyte 2Nbl-IM Homo sapiens cDNA clone IMAGE:249775 5'
8594	21123	34044	2.01	3.0E-38	H85494.1	EST_HUMAN	y488b04.1 Soares melanocyte 2Nbl-IM Homo sapiens cDNA clone IMAGE:249775 5'
9882	22379		1.7	3.0E-38	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
11188	23703		1.54	3.0E-38	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
12461	13800	26312	1.44	3.0E-38	11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (G12ORF3), mRNA
54	12734	25202	1.84	2.0E-38	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
1422	14015	26544	2.23	2.0E-38	5902087	NT	Homo sapiens SMT3 (suppressor of mit two 3, yeast) homolog 2 (SMT3H2), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1888	14280	26814	1.89	2.0E-38	AA437353.1	EST_HUMAN	2k30d01.1 Scores ovary tumor NBH0T Homo sapiens cDNA clone IMAGE:770785 5' similar to SW:MA12 RABIT P45701 MANNOSYL-OLIGOSACCHARIDE ALPHA-1,2-MANNOSIDASE ;
1888	14280	26815	1.90	2.0E-38	AA437353.1	EST_HUMAN	2k30d01.1 Scores ovary tumor NBH0T Homo sapiens cDNA clone IMAGE:770785 5' similar to SW:MA12 RABIT P45701 MANNOSYL-OLIGOSACCHARIDE ALPHA-1,2-MANNOSIDASE ;
4681	17283	29714	2.88	2.0E-38	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
5293	17855	30280	0.63	2.0E-38	BE266224.1	EST_HUMAN	601177386F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532580 5'
5293	17855	30281	0.63	2.0E-38	BE266224.1	EST_HUMAN	601177386F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532580 5'
5327	17837	30284	0.63	2.0E-38	AA437181.1	EST_HUMAN	2k61d09.1 Scores testis_NHT Homo sapiens cDNA clone IMAGE:758129 5' similar to TR:G817867
7704	20213	33102	1.57	2.0E-38	AV721103.1	EST_HUMAN	G817957 GLYCINE RECEPTOR SUBUNIT ALPHA 4 ;
8420	20960	34289	6.5	2.0E-38	BE165880.1	EST_HUMAN	AV721103 HTB Homo sapiens cDNA clone HTBARH11 5'
8826	21365	34289	0.51	2.0E-38	F08450.1	EST_HUMAN	MF3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
8895	21433	34358	1.37	2.0E-38	AF069755.1	NT	HSC-18F031 normalized infant brain cDNA Homo sapiens cDNA clone c-18f03
9148	21683		0.89	2.0E-38	BE222258.1	EST_HUMAN	Homo sapiens orphan G protein-coupled receptor HG20 (HG20) mRNA, complete cds
10345	22839	35835	1.88	2.0E-38	D83479.2	NT	hu09g02.x1 NICI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166130 3' similar to TR:O02710 O02710 GAG POLYPROTEIN ;
11114	23624	36865	3.38	2.0E-38	AA595480.1	EST_HUMAN	Homo sapiens mRNA for KIAA0145 protein, partial cds
11114	23624	36866	3.38	2.0E-38	AA595480.1	EST_HUMAN	nc34g03.s1 NICI CGAP_P123 Homo sapiens cDNA clone IMAGE:1102612 3' similar to TR:E212318
11363	23815	36878	6.15	2.0E-38	BE712780.1	EST_HUMAN	E212316 NADP DEPENDENT LEUKOTRENE B4 12-HYDROXYDEHYDROGENASE ;
11498	23945	37014	3.87	2.0E-38	AF190501.1	NT	nc34g03.s1 NICI CGAP_P123 Homo sapiens cDNA clone IMAGE:1102612 3' similar to TR:E212318
11498	23945	37015	3.87	2.0E-38	AF190501.1	NT	E212316 NADP DEPENDENT LEUKOTRENE B4 12-HYDROXYDEHYDROGENASE ;
11753	24149		7.01	2.0E-38	AV726888.1	EST_HUMAN	nc34g03.s1 NICI CGAP_P123 Homo sapiens cDNA clone IMAGE:1102612 3' similar to TR:E212318
11755	24150		1.88	2.0E-38	AB012723.1	NT	E212316 NADP DEPENDENT LEUKOTRENE B4 12-HYDROXYDEHYDROGENASE ;
12050	24334		3.19	2.0E-38	ME5630.1	NT	QV2-HT0698-080800-283-a05 HT0698 Homo sapiens cDNA
12060	24343	31000	5.31	2.0E-38	H55841.1	EST_HUMAN	Homo sapiens leucine-rich repeat-containing G protein-coupled receptor 6 (LGR6) mRNA, partial cds
12128	24384		2.87	2.0E-38	S74908.1	NT	Homo sapiens leucine-rich repeat-containing G protein-coupled receptor 6 (LGR6) mRNA, partial cds
12824	24702		1.55	2.0E-38	11418248	NT	AV726888 HTC Homo sapiens cDNA clone HTCAX07 5'
1132	13735		2.17	1.0E-38	AA401570.1	EST_HUMAN	Homo sapiens gene for kinesin-like protein, complete cds
2042	14624	27193	1.7	1.0E-38	4885288	NT	Homo sapiens gene for kinesin-like protein, complete cds
							Human topoisomerase I pseudogene 2
							CHR220580 Chromosome 22 exon Homo sapiens cDNA clone C22_788 5'
							E1 beta-pyruvate dehydrogenase beta (promoter) [human, placenta, Genomic, 1280 nt]
							Homo sapiens sulfotransferase-related protein (SULT3), mRNA
							2k62b02.1 Scores testis_NHT Homo sapiens cDNA clone IMAGE:742539 5' similar to contains element
							MER19 repetitive element ;
							Homo sapiens guanine nucleotide binding protein-like 1 (GNL1), mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2065	14645	27219	1.46	1.0E-38	7681069	NT	Homo sapiens KIAA0173 gene product (KIAA0173), mRNA
2539	15103	27678	1.71	1.0E-38	AF270831.1	NT	Homo sapiens cyclin K (CCNK) gene, exon 7
2645	15204	27777	14.28	1.0E-38	4758371	NT	Homo sapiens fibrinogen-like 1 (FGL1), mRNA
4235	16923	28274	1.03	1.0E-38	AB037863.1	NT	Homo sapiens mRNA for KIAA1442 protein, partial cds
4411	16908	29439	0.81	1.0E-38	4505016	NT	Homo sapiens low density lipoprotein receptor-related protein 6 (LRP6) mRNA, and translated products
4416	17001	29444	1.62	1.0E-38	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4416	17001	29445	1.52	1.0E-38	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4702	17284	29729	1.18	1.0E-38	8922543	NT	Homo sapiens hypothetical protein FLJ10600 (FLJ10600), mRNA
5289	17851		28.49	1.0E-38	N46880.1	EST_HUMAN	Y58a01.1 Soares multiple sclerosis 2Nbr-MSP Homo sapiens cDNA clone IMAGE:277704 5' similar to SW:CA1H_MOUSE P39081 COLLAGEN ALPHA 1(XVII) CHAIN PRECURSOR.;
6178	18788	31558	4.28	1.0E-38	7305380	NT	Mus musculus otogelin (Otog), mRNA
6178	18788	31557	4.28	1.0E-38	7305380	NT	Mus musculus otogelin (Otog), mRNA
7435	18959	32824	3	1.0E-38	AB014512.1	NT	Homo sapiens mRNA for KIAA0812 protein, partial cds
9080	21616	34551	0.97	1.0E-38	11422250	NT	Homo sapiens hypothetical protein FLJ10600 (FLJ10600), mRNA
9331	21845	34785	8.34	1.0E-38	BE350127.1	EST_HUMAN	h08g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3148258 3' similar to contains MER29.b3
11465	23915	36883	1.91	1.0E-38	7682108	NT	MER29 repetitive element;
11608	24808		2.57	1.0E-38	AL163284.2	NT	Homo sapiens KIAA0428 gene product (KIAA0428), mRNA
58	12738	26208	8.61	8.0E-39	4502312	NT	Homo sapiens chromosome 21 segment HS21C084
1438	14031	26559	1.49	8.0E-39	4758228	NT	Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar protein pump) 16kD (ATP8C) mRNA
							Homo sapiens estrogen receptor-binding fragment-associated gene 9 (EBAG9) mRNA
1869	14455		0.88	8.0E-39	A823404.1	EST_HUMAN	wh53f10.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2384491 3' similar to TRLP87880 P87880
2141	14719	27280	3.68	7.0E-39	AL163227.2	NT	POL PROTEIN;
10688	23218	36230	2.32	6.0E-39	BF331828.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C027
11639	24078	37138	1.54	6.0E-39	11526372	NT	QV1-BT0631-040900-357402 BT0631 Homo sapiens cDNA
							Homo sapiens hyaluronan-mediated motility receptor (RHAMM) (HMMR), mRNA
12532	24845		2.82	6.0E-39	BE670394.1	EST_HUMAN	7c34c03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284358 3' similar to WP-R151.8
1045	13653	26185	1.85	5.0E-39	AF003528.1	NT	CE00828;
							Homo sapiens X-linked arylsulfatase ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
3014	15630	28108	7.14	5.0E-39	A1750154.1	EST_HUMAN	a138004.x1 Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2374083 3' similar to TR-Q15408
12219	24441		2.69	5.0E-39	11420288	NT	Q15408 NEUTRAL PROTEASE LARGE SUBUNIT contains LTR7.H LTR7 repetitive element;
							Homo sapiens hypothetical protein FLJ10803 (FLJ10803), mRNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
576	13208	25686	35.11	4.0E-39	AB015610.1	NT	Chlorococcus ethiops mRNA for ribosomal protein S4X, complete cds
3631	16234	26709	0.75	4.0E-39	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
5865	18615	31350	0.73	4.0E-39	11422113	NT	Homo sapiens EBNA-2 co-activator (100kd) (p100), mRNA
5866	18616	31351	0.73	4.0E-39	11422113	NT	Homo sapiens EBNA-2 co-activator (100kd) (p100), mRNA
8020	20562	33463	0.95	4.0E-39	AA682849.1	EST_HUMAN	cc82g04.s1 Stratiogene schizo brain S11 Homo sapiens cDNA clone IMAGE:1020438 3' similar to contains
9252	21778	34728	0.82	4.0E-39	DB4116.1	NT	OFF.b1 OFR repetitive element;
9252	21778	34729	0.82	4.0E-39	DB4116.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 2
12237	24452		4.45	4.0E-39	11418177	NT	Homo sapiens DNA for prostacyclin synthase, exon 2
12363	24538		5.52	4.0E-39	BE838452.1	EST_HUMAN	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
51	12731	25186	16.82	3.0E-39	AA631949.1	EST_HUMAN	QV0-FN0063-260600-278-c06 FN0063 Homo sapiens cDNA
51	12731	25187	16.82	3.0E-39	AA631949.1	EST_HUMAN	fimfc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
51	12731	25188	16.82	3.0E-39	AA631949.1	EST_HUMAN	fimfc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
11744	24143	36764	6.46	3.0E-39	AK84557.1	EST_HUMAN	fimfc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
11744	24143	36765	6.46	3.0E-39	AK84557.1	EST_HUMAN	cc83a10.s1 Soares NIHMPU_S1 Homo sapiens cDNA clone IMAGE:1680986 3' similar to SW:GTR5_RAT
11791	24174		6.83	3.0E-39	H97803.1	EST_HUMAN	P43427 GLUCOSE TRANSPORTER TYPE 5, SMALL INTESTINE;
930	13543		9.84	2.0E-39	BE409203.1	EST_HUMAN	cc83a10.s1 Soares NIHMPU_S1 Homo sapiens cDNA clone IMAGE:1680986 3' similar to SW:GTR5_RAT
946	13568		16.07	2.0E-39	AI525119.1	EST_HUMAN	P43427 GLUCOSE TRANSPORTER TYPE 5, SMALL INTESTINE;
1069	13674		3.85	2.0E-39	AF000573.1	NT	yp51c08.s1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:180954 3'
1577	14170		41.87	2.0E-39	AW372318.1	EST_HUMAN	601301607F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636289 5'
2016	14588	27162	2.5	2.0E-39	AA720574.1	EST_HUMAN	promima-7.D01.r bVulmur Homo sapiens cDNA 5'
2657	15216	27768	1.56	2.0E-39	AL163248.2	NT	Homo sapiens homogenisate 1,2-dioxygenase gene, complete cds
4492	17077	28527	1.7	2.0E-39	BF370207.1	EST_HUMAN	FM0-BTD340-211289-003-d02 BT0340 Homo sapiens cDNA
5882	18308	30804	3.89	2.0E-39	AA508880.1	EST_HUMAN	mw21g02.s1 NCJ_CGAP_Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR.13
7405	19630	32794	1.95	2.0E-39	AA080867.1	EST_HUMAN	THR repetitive element;
8252	20793	33710	0.55	2.0E-39	AF078779.1	NT	Homo sapiens chromosome 21 segment HS21C048
9415	21924		0.56	2.0E-39	AA984531.1	EST_HUMAN	RC4-FN0037-260700-011-a10 FN0037 Homo sapiens cDNA
8544	22044		0.54	2.0E-39	AI886660.1	EST_HUMAN	ng88f03.s1 NCJ_CGAP_P16 Homo sapiens cDNA clone IMAGE:941683
11309	23802	36863	3.11	2.0E-39	DB8894.1	NT	zn06f02.L1 Stratiogene hNT neuron (#637233) Homo sapiens cDNA clone IMAGE:546651 5'
1560	14152	26884	2.33	1.0E-39	AJ006345.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
1560	14152	26885	2.33	1.0E-39	AJ006345.1	NT	em88e11.s1 Stratiogene schizo brain S11 Homo sapiens cDNA clone IMAGE:1630186 3'
							tu35e03.x1 NCJ_CGAP_P128 Homo sapiens cDNA clone IMAGE:2283052 3'
							Human mRNA for KIAA0209 gene, partial cds
							Homo sapiens KVLQT1 gene
							Homo sapiens KVLQT1 gene

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Single Exon Probes Expressed In Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1578	14171	28700	9.78	1.0E-39	7857020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
4719	17300	28745	0.97	1.0E-39	AW286073.1	EST_HUMAN	UHH-BW0-edu-h-06-0-U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:2730850 3'
4764	17345	28793	4.98	1.0E-39	AW961995.1	EST_HUMAN	EST304095 MAGE resequences, MAGB Homo sapiens cDNA
4784	17345	28794	4.98	1.0E-39	AW961995.1	EST_HUMAN	EST304095 MAGE resequences, MAGB Homo sapiens cDNA
4812	17390	28841	10.18	1.0E-39	7857020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
5561	18192	30638	0.88	1.0E-39	11417342	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaforin) 5A (SEMA5A), mRNA
5561	18192	30639	0.88	1.0E-39	11417342	NT	(TM) and short cytoplasmic domain, (semaforin) 5A (SEMA5A), mRNA
5812	18436	31157	1.13	1.0E-39	T80876.1	EST_HUMAN	Yd28g06.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:109402 5' similar to contains
5845	18468	31184	5.75	1.0E-39	AJ278170.1	NT	Alu repetitive element, contains LTR1 repetitive element ;
5845	18468	31185	5.75	1.0E-39	AJ278170.1	NT	Mus musculus mRNA for neuronal interacting factor X 1 (NIX1) (Nix1 gene)
6814	18573	32790	1.87	1.0E-39	11436738	NT	Mus musculus mRNA for neuronal interacting factor X 1 (NIX1) (Nix1 gene)
7400	18925	32790	2.28	1.0E-39	D78132.1	NT	Homo sapiens tubby like protein 3 (TULP3), mRNA
8499	21038	33859	0.85	1.0E-39	O46530	SWISSPROT	Homo sapiens mRNA for res-related GTP-binding protein, complete cds
12161	24401	24401	4.3	1.0E-39	U07000.1	NT	RIBONUCLEASE K8 PRECURSOR (RNASE K8)
581	13211	25689	2.07	9.0E-40	5803210	NT	Human breakpoint cluster region (BCR) gene, complete cds
1278	13873	26392	20.54	9.0E-40	4755145	NT	Homo sapiens UDP-glucose pyrophosphorylase 2 (UGP2), mRNA
1278	13873	26393	20.54	9.0E-40	4755145	NT	Homo sapiens AE-binding protein 1 (AEBP1) mRNA
1498	14090	26630	1.54	9.0E-40	4507512	NT	Homo sapiens tissue inhibitor of metalloproteinase 3 (Sorsby fundus dystrophy, pseudoinflammatory) (TIMP3) mRNA
3653	16451	28914	0.88	9.0E-40	4503784	NT	Homo sapiens fragile X mental retardation 1 (FMR1) mRNA
4045	18004	29108	3.57	9.0E-40	AB033070.1	NT	Homo sapiens mRNA for KIAA1244 protein, partial cds
3077	15692	28186	1	8.0E-40	AA078105.1	EST_HUMAN	7H15A04 Chromosome 7 Hela cDNA Library Homo sapiens cDNA clone 7H15A04
3698	16594		1.74	8.0E-40	BE396541.1	EST_HUMAN	60128858F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3619186 5'
7702	20211	33098	2.01	7.0E-40	U60325.1	NT	Human DNA polymerase gamma mRNA, nuclear gene encoding mitochondrial protein, complete cds
7702	20211	33099	2.01	7.0E-40	U60325.1	NT	Human DNA polymerase gamma mRNA, nuclear gene encoding mitochondrial protein, complete cds
10776	23300	36308	2.48	7.0E-40	AL183248.2	NT	Homo sapiens chromosome 21 segment HS21CD46
2753	15308	27873	5.43	6.0E-40	AA361275.1	EST_HUMAN	EST70627 T-cell lymphoma Homo sapiens cDNA 5' end similar to zinc finger protein family

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2753	15308	27874	5.43	6.0E-40	AA381275.1	EST_HUMAN	EST70527 T-cell lymphoma Homo sapiens cDNA 5' end similar to similar to zinc finger protein family
6094	18710		2.11	6.0E-40	BE504786.1	EST_HUMAN	h240p01.x1 NCI_CGAP_G081 Homo sapiens cDNA clone IMAGE:3210480 3'
6296	18904		1.42	6.0E-40	7861999	NT	Homo sapiens KIAA0211 gene product (KIAA0211), mRNA
7016	19513	32334	4.18	6.0E-40	11439783	NT	Homo sapiens fatty acid desaturase 1 (FADS1), mRNA
7015	19513	32335	4.18	6.0E-40	11439783	NT	Homo sapiens fatty acid desaturase 1 (FADS1), mRNA
8887	22384	35380	8.69	6.0E-40	AV653028.1	EST_HUMAN	AV653028 GLC Homo sapiens cDNA clone GLC0GF04 3'
8887	22384	35381	8.69	6.0E-40	AV653028.1	EST_HUMAN	AV653028 GLC Homo sapiens cDNA clone GLC0GF04 3'
1919	14504	27061	1.42	4.0E-40	AI686005.1	EST_HUMAN	h91b01.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2248873 3' similar to TR-O73505 O73505 POL. PROTEIN. ;
2155	14732		1.38	4.0E-40	AF003528.1	NT	Homo sapiens X-linked arylidic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
4478	17063	28513	9.28	4.0E-40	7862117	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
7827	20369	33277	0.59	4.0E-40	AJ127831.1	EST_HUMAN	AJ127831 NT2RP2 Homo sapiens cDNA clone NT2RP2002172 5'
7833	20475	33384	4.44	4.0E-40	AA742809.1	EST_HUMAN	m34e10.1 NCI_CGAP_Br4 Homo sapiens cDNA clone IMAGE:1222122
8885	21523	34451	3.91	4.0E-40	BE009416.1	EST_HUMAN	PMO-BN0167-070500-002-H12 BN0167 Homo sapiens cDNA
8885	21523	34452	3.91	4.0E-40	BE009416.1	EST_HUMAN	PMO-BN0167-070500-002-H12 BN0167 Homo sapiens cDNA
10595	23129	36143	3.06	4.0E-40	AW841585.1	EST_HUMAN	RC1-CN0017-120200-012-004 CN0017 Homo sapiens cDNA
4212	16801	28250	0.89	3.0E-40	AI925949.1	EST_HUMAN	wh1207.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2380549 3'
6750	19943	32150	7.27	3.0E-40	11417342	NT	Homo sapiens serpin domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (serpin) 5A (SEMA5A), mRNA
8321	20982	33787	3.69	3.0E-40	5454167	NT	Homo sapiens HBV associated factor (XAP4) mRNA
8889	21437	34380	1.28	3.0E-40	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
9138	21673	34616	1.58	3.0E-40	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
10541	23078	36082	1.79	3.0E-40	D98984.1	NT	Human mRNA for KIAA0209 gene, partial cds
10903	23423	38442	2.21	3.0E-40	BE350127.1	EST_HUMAN	h08g01.x1 NCI_CGAP_Kd13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER28.b3 MER28 repetitive element ;
11145	23653	36895	13.89	3.0E-40	6005813	NT	Homo sapiens serine protein kinase (NDR), mRNA
11445	23695	36980	1.58	3.0E-40	AW118799.1	EST_HUMAN	xd89h02.x1 Soares_NFL_T_G8C_S1 Homo sapiens cDNA clone IMAGE:2805491 3' similar to TR-Q16804 Q15804 SIMILAR TO ENV OF TYPE A AND TYPE B RETROVIRUSES AND TO CLASS II HERVS ;
347	12988		4.35	2.0E-40	A1223036.1	EST_HUMAN	qg52h08.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1838847 3'
827	13444		22.71	2.0E-40	AW303988.1	EST_HUMAN	xr24e10.x1 NCI_CGAP_Uk4 Homo sapiens cDNA clone IMAGE:2761098 3' similar to SW.RS6_MOUSE P97461 40S RIBOSOMAL PROTEIN S6. ;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1885	14451		1.38	2.0E-40	AV731801.1	EST_HUMAN	AV731801 HTF Homo sapiens cDNA clone HTFAZE05 5'
1878	14561	27119	1.39	2.0E-40	4506188	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 7 (PSMA7) mRNA, and translated products
1878	14561	27120	1.39	2.0E-40	4506188	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 7 (PSMA7) mRNA, and translated products
2116	14684	27282	0.95	2.0E-40	A088582.1	EST_HUMAN	W80a11.x1 NCL CGAP_G08 Homo sapiens cDNA clone IMAGE:2514716 3' similar to TRQ81829 Q81829
2214	14789	27363	1.88	2.0E-40	5453592	NT	ZINC FINGER PROTEIN. ;
2714	15271		1.25	2.0E-40	BE275932.1	EST_HUMAN	Homo sapiens adenyl cyclase-associated protein 2 (CAP2) mRNA
3160	15774	28242	4.32	2.0E-40	5453592	NT	601121587F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3345784 5'
5027	17601	30046	1.84	2.0E-40	AL163280.2	NT	Homo sapiens adenyl cyclase-associated protein 2 (CAP2) mRNA
5027	17601	30047	1.84	2.0E-40	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
5379	17638	30351	3.28	2.0E-40	4505880	NT	Homo sapiens chromosome 21 segment HS21C080
916	13528		1.05	1.0E-40	AA225989.1	EST_HUMAN	Homo sapiens plasminogen (PLG) mRNA
3337	15947		1.47	1.0E-40	4507142	NT	nc09a09.s1 NCL CGAP_P11 Homo sapiens cDNA clone IMAGE:1007608
4716	17297	28742	4.95	1.0E-40	4508012	NT	Homo sapiens sorting nexin 3 (SNX3) mRNA
6403	18008	31786	0.69	1.0E-40	W92708.1	EST_HUMAN	Homo sapiens zinc finger protein 200 (ZNF200) mRNA, and translated products
6403	18008	31787	0.69	1.0E-40	W92708.1	EST_HUMAN	zh79f11.s1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418317 3'
7145	19678	32518	2.12	1.0E-40	AA573201.1	EST_HUMAN	zh79f11.s1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418317 3'
7145	19678	32519	2.12	1.0E-40	AA573201.1	EST_HUMAN	rh42704.s1 NCL CGAP_AA1 Homo sapiens cDNA clone IMAGE:995167 3'
7283	18811	32667	0.83	1.0E-40	P28808	SWISSPROT	rh42704.s1 NCL CGAP_AA1 Homo sapiens cDNA clone IMAGE:995167 3'
10787	23320	36330	4.13	1.0E-40	AU148345.1	EST_HUMAN	POL POLYPROTEIN [CONTAINS: PROTEASE; REVERSE TRANSCRIPTASE; RIBONUCLEASE H]
11615	24057		1.72	1.0E-40	AL163246.2	NT	AU148345 NT2RM4 Homo sapiens cDNA clone NT2RM4002122 3'
12182	24058		7.52	1.0E-40	BF334112.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
3976	16474	28938	0.65	9.0E-41	W01596.1	EST_HUMAN	MR2-CT0222-211089-002-e10 CT0222 Homo sapiens cDNA
7862	20404	33311	1.88	8.0E-41	AL163203.2	NT	zs38a02.r1 Soares fetal liver spleen_1NFLS Homo sapiens cDNA clone IMAGE:284602 5'
861	15427	25990	1.58	7.0E-41	A084384.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
861	15427	25991	1.58	7.0E-41	A084384.1	EST_HUMAN	wp04h04.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2463895 3'
5411	17688	30377	0.95	7.0E-41	11431114	NT	wp04h04.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2463895 3'
5469	18103	30422	0.84	7.0E-41	11545770	NT	Homo sapiens hypodermal protein (FLJ10898), mRNA
6159	18772	31535	3.44	7.0E-41	11419208	NT	Homo sapiens hypodermal protein FLJ13188 (FLJ13188), mRNA
6494	19095	31879	0.8	7.0E-41	11433010	NT	Homo sapiens a disintegrin and metalloprotease domain 22 (ADAM22), mRNA
7067	18096	30442	0.95	7.0E-41	U72335.1	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1), mRNA
							Human platelet activating factor acetylhydrolase, brain isoform, 45 kDa subunit (LS1) gene, exons 3 and 4

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11311	23804	36884	1.98	7.0E-41	4758445	NT	Homo sapiens guanine nucleotide binding protein 10 (GNG10) mRNA
12831	24852		8.97	7.0E-41	11417972	NT	Homo sapiens pescadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
302	12867	25447	1.42	6.0E-41	AB037163.1	NT	Homo sapiens DSCR5b mRNA, complete cds
2157	14734	27307	2.33	6.0E-41	7657042	NT	Homo sapiens Down syndrome candidate region 1 (DSCR1), mRNA
7812	20454	33360	1.58	6.0E-41	BF513783.1	EST_HUMAN	UH-BW1-amp-b-03-0-U1.s1 NC1 CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3070421 3'
12611	24873		1.61	6.0E-41	AW873637.1	EST_HUMAN	h04f08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:3042183 3' similar to contains
1838	14428	26877	2.16	5.0E-41	T62828.1	EST_HUMAN	MER32.b3 MER32 repetitive element;
4184	16774		1.01	5.0E-41	4885638	NT	yc03e10.s1 Stratagene lung (#837210) Homo sapiens cDNA clone IMAGE:78626 3'
6867	19283		1.97	6.0E-41	BE067042.1	EST_HUMAN	Homo sapiens target of myb1 (chicken) homolog (TOM1), mRNA
414	13048		1.58	4.0E-41	BE156318.1	EST_HUMAN	PM4-BT0341-251199-002-F11 BT0341 Homo sapiens cDNA
1137	13740	26249	1.12	4.0E-41	AU119344.1	EST_HUMAN	QV0-HT0367-150200-114-g09 HT0367 Homo sapiens cDNA
							AU118344 HEMBA1 Homo sapiens cDNA clone HEMBA1005583 5'
1455	14047	26577	9.23	4.0E-41	AK27117.1	EST_HUMAN	ow45e06.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1849784 3' similar to
							TR:000597 000597 CYTOCHROME C-LIKE POLYPEPTIDE.; contains LTR5.b1 LTR5 repetitive element;
1455	14047	26578	9.23	4.0E-41	AK27117.1	EST_HUMAN	ow45e06.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1849784 3' similar to
1489	14061	26596	1.67	4.0E-41	AB008881.1	NT	TR:000597 000597 CYTOCHROME C-LIKE POLYPEPTIDE.; contains LTR5.b1 LTR5 repetitive element;
							Homo sapiens gene for activin receptor type IIB, complete cds
1677	14289	26802	8.43	4.0E-41	AJ500406.1	EST_HUMAN	hm96c04.x1 NC1 CGAP_Brn26 Homo sapiens cDNA clone IMAGE:2169358 3' similar to contains OFR.b1
							OFR repetitive element;
2913	15530	28001	3.73	4.0E-41	AJ228041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
2913	15530	28002	3.73	4.0E-41	AJ228041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
4225	16813	28260	2.27	4.0E-41	X82685.1	NT	H.sapiens DNase I hypersensitive site (HSS-3) enhancer element
6832	19228		1.36	4.0E-41	AV786295.1	EST_HUMAN	AV786295 BM Homo sapiens cDNA clone BMFBHC08 5'
9610	22110	35072	6.75	4.0E-41	BF304683.1	EST_HUMAN	601888096F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122119 5'
11522	23970		9.87	4.0E-41	AV710480.1	EST_HUMAN	AV710480 Cu Homo sapiens cDNA clone CuAAC007 5'
12375	24841		2.28	4.0E-41	AV708431.1	EST_HUMAN	AV708431 ADC Homo sapiens cDNA clone ADCARE02 5'
12570	24689	30875	4.65	4.0E-41	BE887118.1	EST_HUMAN	601508315F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3910059 5'
683	13595	28109	1.64	3.0E-41	AB030176.1	NT	Homo sapiens PAD-H19 mRNA for peptidylarginine deiminase type II, complete cds
							Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
4428	17014	28456	2.7	3.0E-41	AB026898.1	NT	Homo sapiens mRNA for KIAA1327 protein, partial cds
5273	17834		1.03	3.0E-41	AB037748.1	NT	H.sapiens mRNA for putative p64 GLCP protein
5683	18310	30805	9.55	3.0E-41	X87689.1	NT	

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6618	19118	31909	1.73	3.0E-41	AB037808.1	NT	Homo sapiens mRNA for KIAA1387 protein, partial cds
7761	20269	33167	0.7	3.0E-41	R54765.1	EST_HUMAN	U75008.1 Soares breast 2NblBst Homo sapiens cDNA clone IMAGE:154575 5'
11575	24021	37090	1.78	3.0E-41	AJ228041.1	NT	Homo sapiens 859 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
11703	24116		1.84	3.0E-41	AA609768.1	EST_HUMAN	af17110.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1031947 3'
1864	14200	28734	15.09	2.0E-41	U43701.1	NT	Human ribosomal protein L23a mRNA, complete cds
2001	14583	27142	1.76	2.0E-41	AA331940.1	EST_HUMAN	EST35818 Embryo, 8 week Homo sapiens cDNA 5' end
2260	14834	27412	1.13	2.0E-41	D86962.1	NT	Human mRNA for KIAA0207 gene, complete cds
2308	14880	27456	3.79	2.0E-41	X89631.1	NT	G.gorilla DNA for ZNF80 gene homolog
2855	14200	28734	10.67	2.0E-41	U43701.1	NT	Human ribosomal protein L23a mRNA, complete cds
4728	17309	29753	2.07	2.0E-41	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C067
4728	17309	29754	2.07	2.0E-41	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C067
7688	20178	33065	6.67	2.0E-41	AF038404.1	NT	Homo sapiens homolog of Nedd5 (hNedd5) mRNA, complete cds
8013	20555	33458	1.38	2.0E-41	M89844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
8013	20555	33459	1.38	2.0E-41	M89844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
8040	20582	33489	1.59	2.0E-41	AA328265.1	EST_HUMAN	EST31723 Embryo, 12 week Homo sapiens cDNA 5' end
8905	21443	34368	1.61	2.0E-41	P52742	SWISSPROT	ZINC FINGER PROTEIN 135
9338	21852	34800	0.74	2.0E-41	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
9338	21852	34801	0.74	2.0E-41	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
11359	23813	36873	3.78	2.0E-41	AA372637.1	EST_HUMAN	EST84555 Colon adenocarcinoma IV Homo sapiens cDNA 5' end
3240	15852	28333	1.11	1.0E-41	BE869735.1	EST_HUMAN	601445647F1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:3849803 5'
3240	15852	28334	1.11	1.0E-41	BE869735.1	EST_HUMAN	601445647F1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:3849803 5'
4668	17248	29701	11.21	1.0E-41	6679468	NT	Mus musculus tubulin alpha 6 (Tubae6), mRNA
9339	21853	34802	1.82	1.0E-41	AJ217888.1	EST_HUMAN	q775c10.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1758558 3'
11039	23553	36598	2.41	1.0E-41	AW847812.1	EST_HUMAN	IL3-CT0213-190200-040-F08 CT0213 Homo sapiens cDNA
11842	24204		2.37	1.0E-41	11526291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
8457	20997		1.34	9.0E-42	BE179191.1	EST_HUMAN	RC0-HT0613-210300-032-g01 HT0613 Homo sapiens cDNA
9101	21637	34575	2.43	9.0E-42	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
9101	21637	34576	2.43	9.0E-42	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
488	13121	25607	7.59	8.0E-42	AF003530.1	NT	Homo sapiens homeobox protein CDX4 (CDX4) gene, complete cds and flanking repeat regions
11861	24959		53.38	8.0E-42	AA493886.1	EST_HUMAN	h07g02.s1 NCI_CGAP_Thy1 Homo sapiens cDNA clone IMAGE:343586 similar to TR:G434304 G434304
11900	24830		2.62	8.0E-42	AW088062.1	EST_HUMAN	387BP EXPRESSED SEQUENCE TAG MRNA ; xc97a04.x1 NCI_CGAP_Bm35 Homo sapiens cDNA clone IMAGE:2562174 3' similar to contains OFR.2
967	13578		2.5	7.0E-42	AL163285.2	NT	OFR repetitive element ; Homo sapiens chromosome 21 segment HS21C085

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8408	20948		0.62	7.0E-42	R10903.1	EST_HUMAN	yf38g04.f1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:128174 5'
9188	21745	34688	1.88	7.0E-42	A1204358.1	EST_HUMAN	qf58g12.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1754278 3'
11052	23565	36800	1.59	7.0E-42	AA588582.1	EST_HUMAN	nf23g07.s1 NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE:914652
11052	23565	36801	1.59	7.0E-42	AA588582.1	EST_HUMAN	nf23g07.s1 NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE:914652
1898	14481	27039	4.44	6.0E-42	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
1898	14481	27040	4.44	6.0E-42	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
2328	14889		3.38	6.0E-42	AW238686.1	EST_HUMAN	xp28f08.x1 NCI_CGAP_HN10 Homo sapiens cDNA clone IMAGE:2741788 3' similar to contains L1.H1 L1 repetitive element;
5659	18288	30784	1.48	6.0E-42	AB028990.1	NT	Homo sapiens mRNA for KIAA1087 protein, partial cds
5893	18288	30784	1.5	6.0E-42	AB028990.1	NT	Homo sapiens mRNA for KIAA1087 protein, partial cds
141	12808		6.21	5.0E-42	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
463	13097	25588	1.39	5.0E-42	BE217813.1	EST_HUMAN	hm31e11.x1 NCI_CGAP_LU24 Homo sapiens cDNA clone IMAGE:3175052 3'
512	13145		4.36	5.0E-42	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
513	13146		2.72	5.0E-42	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
6788	19379	32194	1.23	5.0E-42	11433063	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A), mRNA
6788	19379	32195	1.23	5.0E-42	11433063	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A), mRNA
6883	19827	32464	2.58	5.0E-42	11417857	NT	Homo sapiens myotubularin related protein 3 (MTMR3), mRNA
7263	19781	32837	1.84	6.0E-42	AF071689.1	NT	Homo sapiens multifunctional calcium/calmodulin-dependent protein kinase II delta2 isoform mRNA, complete cds
8713	21252	34174	2.85	5.0E-42	AB037715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
10495	22889	35697	0.8	5.0E-42	11431168	NT	Homo sapiens 3-hydroxyanthranilate 3,4-dioxygenase (HAAO), mRNA
10495	22889	35698	0.8	5.0E-42	11431168	NT	Homo sapiens 3-hydroxyanthranilate 3,4-dioxygenase (HAAO), mRNA
10877	23398	36415	1.82	5.0E-42	8923162	NT	Homo sapiens hypothetical protein FLJ20163 (FLJ20163), mRNA
783	13402	25905	7.93	4.0E-42	AF055068.1	NT	Homo sapiens MHC class 1 region
783	13402	25908	7.93	4.0E-42	AF055068.1	NT	Homo sapiens MHC class 1 region
1104	13708	26217	2.39	4.0E-42	AF189011.1	NT	Homo sapiens ribonuclease III (RN3) mRNA, complete cds
4272	18858	26307	1.48	4.0E-42	X59417.1	NT	H. sapiens PROS-27 mRNA
4335	18922	26384	6.27	4.0E-42	4508498	NT	Homo sapiens regulatory factor X, 4 (influences HLA class II expression) (RFX4) mRNA
4683	17285	29715	13.42	4.0E-42	4508008	NT	Homo sapiens zinc finger protein 177 (ZNF177) mRNA
5353	17913	30328	0.94	4.0E-42	7881635	NT	Homo sapiens DKFZP564O2082 protein (DKFZP564O2082), mRNA
10378	22872	35865	0.48	4.0E-42	AW371201.1	EST_HUMAN	CMD-BT0282-171290-127-b03 BT0282 Homo sapiens cDNA
10528	23065	36076	1.76	4.0E-42	AW818630.1	EST_HUMAN	RC1-ST0278-040400-018-h11 ST0278 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10528	23085	36077	1.76	4.0E-42	AW18630.1	EST_HUMAN	RC1-ST0278-040400-018-h11 ST0278 Homo sapiens cDNA
11280	23742	36769	3.45	4.0E-42	BF035327.1	EST_HUMAN	60145831F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3662088 5'
1330	14122	26681	4.49	2.0E-42	BF376834.1	EST_HUMAN	RC0-TN0079-110900-024-g07 TN0079 Homo sapiens cDNA
2436	15003	27575	0.92	2.0E-42	AV690218.1	EST_HUMAN	AV690218 GKC Homo sapiens cDNA clone GKCC8808 5'
2456	15023		2.69	2.0E-42	AW886344.1	EST_HUMAN	RC3-NN0070-270400-011-h10 NN0070 Homo sapiens cDNA
2469	15036	27603	2.41	2.0E-42	AW250059.1	EST_HUMAN	2819283.3prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2819283 3'
5931	18553	31279	13.21	2.0E-42	AW955368.1	EST_HUMAN	EST367438 MAGE resequences, MAGE Homo sapiens cDNA
5931	18553	31280	13.21	2.0E-42	AW955368.1	EST_HUMAN	EST367438 MAGE resequences, MAGE Homo sapiens cDNA
6949	19439	32253	0.84	2.0E-42	AI052366.1	EST_HUMAN	aw63d05.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1653417 3'
9755	22283	35235	1.1	2.0E-42	BE538919.1	EST_HUMAN	601081284F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3447620 5'
9967	22482	35445	0.53	2.0E-42	P81649	SWISSPROT	RIBONUCLEASE K3 (RNAASE K3)
9967	22482	35446	0.53	2.0E-42	P81649	SWISSPROT	RIBONUCLEASE K3 (RNAASE K3)
11565	24030	37100	1.55	2.0E-42	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
763	13381	25860	1.92	1.0E-42	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
1080	13695	26197	0.84	1.0E-42	AW285808.1	EST_HUMAN	UI-H-B11-affr-e-04-0-UJ.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2721871 3'
1140	13743	26252	2.09	1.0E-42	AJ251818.1	NT	Homo sapiens partial C9 gene for complement component C9, exon 1
1140	13743	26253	2.08	1.0E-42	AJ251818.1	NT	Homo sapiens partial C9 gene for complement component C9, exon 1
1285	15437	26404	10.72	1.0E-42	AF067166.1	NT	Homo sapiens NADH-ubiquinone oxidoreductase AGGG subunit precursor homolog mRNA, nuclear gene encoding mitochondrial protein, complete cds
1285	15437	26405	10.72	1.0E-42	AF067166.1	NT	Homo sapiens NADH-ubiquinone oxidoreductase AGGG subunit precursor homolog mRNA, nuclear gene encoding mitochondrial protein, complete cds
1738	14326	26872	1.86	1.0E-42	11423219	NT	Homo sapiens rec (LOC31201), mRNA
2581	15144	27712	5.25	1.0E-42	5174458	NT	Homo sapiens major histocompatibility complex, class II, DM alpha (HLA-DMA) mRNA
2691	15607	28087	6.58	1.0E-42	4505524	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORC5L) mRNA, and translated products
3770	16371	28836	2.85	1.0E-42	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
3962	16460	28924	0.83	1.0E-42	5031610	NT	Homo sapiens Golgi vesicular membrane trafficking protein p18 (BET1) mRNA
3969	16597	29069	1.07	1.0E-42	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C067
4331	16918	29361	1.92	1.0E-42	AL163260.2	NT	Homo sapiens chromosome 21 segment HS21C080
4697	17279	29725	0.86	1.0E-42	AW813617.1	EST_HUMAN	RC3-ST0197-161090-012-403 ST0197 Homo sapiens cDNA
4856	17434	29885	2.65	1.0E-42	5803122	NT	Homo sapiens proteasome inhibitor (PI31), mRNA
4856	17434	29886	2.65	1.0E-42	5803122	NT	Homo sapiens proteasome inhibitor (PI31), mRNA
4893	17468	29924	6.23	1.0E-42	4506758	NT	Homo sapiens tyrosine receptor 3 (RYR3) mRNA
5274	17835	30260	1.48	1.0E-42	4501912	NT	Homo sapiens a disintegrin and metalloprotease domain 23 (ADAM23) mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6274	17835	30281	1.48	1.0E-42	4501912	NT	Homo sapiens a disintegrin and metalloprotease domain 23 (ADAM23) mRNA
9888	22493	35482	3.35	9.0E-43	4757989	NT	Homo sapiens chromodomain protein, Y chromosome-like (CDYL) mRNA
10916	23435	38455	3.57	9.0E-43	AA435719.1	EST_HUMAN	z79a07.s1 Soares testis NHT Homo sapiens cDNA clone IMAGE:728532 3'
680	13304	25788	22.52	8.0E-43	AV738824.1	EST_HUMAN	AV738824 CB Homo sapiens cDNA clone CBLAQ408 5'
680	13304	25787	22.52	8.0E-43	AV738824.1	EST_HUMAN	AV738824 CB Homo sapiens cDNA clone CBLAQ408 5'
729	13349	25841	7.38	8.0E-43	8823278	NT	Homo sapiens hypothetical protein FLJ20287 (FLJ20287), mRNA
729	13349	25842	7.38	8.0E-43	8823278	NT	Homo sapiens hypothetical protein FLJ20287 (FLJ20287), mRNA
729	13349	25843	7.38	8.0E-43	8823278	NT	Homo sapiens hypothetical protein FLJ20287 (FLJ20287), mRNA
5877	18469	31225	0.82	8.0E-43	H13952.1	EST_HUMAN	y08a11.1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:146172 5'
3703	18304	28772	7.8	7.0E-43	AW246442.1	EST_HUMAN	2822251.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822251 5'
5414	17971	30381	1.1	7.0E-43	AA988045.1	EST_HUMAN	cr88a07.s1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1602900 3' similar to contains LTR8 b3 LTR8 repetitive element ;
5414	17971	30382	1.1	7.0E-43	AA988046.1	EST_HUMAN	cr88a07.s1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1602900 3' similar to contains LTR8 b3 LTR8 repetitive element ;
8704	21243		3.4	7.0E-43	AB96748.1	EST_HUMAN	wf68b01.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2468985 3' similar to TR:O15475 O15475 UNNAMED HERV-H PROTEIN ; contains LTR7 b1 LTR7 repetitive element ;
1388	13982		9.98	6.0E-43	AA491880.1	EST_HUMAN	ne72a08.s1 NCI_CGAP_Ew1 Homo sapiens cDNA clone IMAGE:309803 similar to gb:U05095 60S RIBOSOMAL PROTEIN L30 (HUMAN);
2628	15190		2.44	6.0E-43	AV708201.1	EST_HUMAN	AV708201 ADC Homo sapiens cDNA clone ADCAGC10 5'
6453	18054	31839	2.54	6.0E-43	8955973	NT	Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 3 (ABCC3), transcript variant MRP3B, mRNA
6888	19486	32308	2.15	6.0E-43	AW468997.1	EST_HUMAN	hd30b04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2910991 3' similar to contains MER1.13 MER1 MER1 repetitive element ;
9765	22263	35246	2.2	6.0E-43	AA185154.1	EST_HUMAN	z735a08.1 Soares_NhlHMPu_S1 Homo sapiens cDNA clone IMAGE:665410 5' similar to TR:G528641 G528641 DB1, COMPLETE CDS ; contains element PTR7 repetitive element ;
10980	23494		6.53	6.0E-43	AL119158.1	EST_HUMAN	DKFZp761L1712.1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761L1712 5'
149	12812		1.7	5.0E-43	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
528	13160	25641	3.37	5.0E-43	AA382780.1	EST_HUMAN	EST186033 Testis 1 Homo sapiens cDNA 5' end
2872	15490	27861	1.18	5.0E-43	AV732578.1	EST_HUMAN	AV732578 HTF Homo sapiens cDNA clone HTFANC08 5'
6447	19481	32302	1.23	5.0E-43	AB13509.1	EST_HUMAN	hw22a07.x1 NCI_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2280462 3'
6883	19481	32302	0.77	5.0E-43	AB13509.1	EST_HUMAN	hw22a07.x1 NCI_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2280462 3'
8812	21351		0.49	5.0E-43	H74277.1	EST_HUMAN	y449g12.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:228510 5'
9286	21886	34831	3.67	5.0E-43	AA465288.1	EST_HUMAN	aw33a08.1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:815055 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10287	22791	35781	2.17	5.0E-43	A1733244.1	EST_HUMAN	cc62c10.x5 NCL_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1588810 3' similar to TR:P90591 P90591
10332	22828	35821	2.14	5.0E-43	AL049110.1	EST_HUMAN	PV14 GENE.;
10644	23178	36188	6.05	5.0E-43	AW863007.1	EST_HUMAN	DKFZp434D07119.1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434D07119
10850	23371	36380	4.1	5.0E-43	W28011.1	EST_HUMAN	MR2-SN0007-280400-004-c02 SN0007 Homo sapiens cDNA
11332	23030	36039	1.71	5.0E-43	X15804.1	NT	55a4 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
1008	15390	26133	5.38	4.0E-43	AF003528.1	NT	Human mRNA for alpha-actinin
5464	18059	30417	0.98	4.0E-43	AI056338.1	EST_HUMAN	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
6507	19107	31862	0.82	4.0E-43	6986009	NT	0y47M03.x1 NCL_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:1668013 3'
7184	19716		2.22	4.0E-43	11416793	NT	Homo sapiens glycyl-RNA synthetase (GARS), mRNA
8118	20656	33568	4.54	4.0E-43	A1244341.1	EST_HUMAN	Homo sapiens protocadherin beta 6 (PCDH6), mRNA
8118	20659	33569	4.54	4.0E-43	A1244341.1	EST_HUMAN	q76a02.x1 NCL_CGAP_K163 Homo sapiens cDNA clone IMAGE:1885354 3' similar to contains MER10.13
10217	22712	35704	1.33	4.0E-43	6905987	NT	MER10 repetitive element;
11184	23699	36738	1.88	4.0E-43	T77380.1	EST_HUMAN	q76a02.x1 NCL_CGAP_K163 Homo sapiens cDNA clone IMAGE:1885364 3' similar to contains MER10.13
11819	24189		4.47	4.0E-43	R20950.1	EST_HUMAN	MER10 repetitive element;
1255	13852		3.54	3.0E-43	AF223391.1	NT	Homo sapiens zinc finger protein 161 (ZNF161), mRNA
1733	14324	26866	1.8	3.0E-43	X97868.1	NT	y172h10.r1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:113827 5'
2178	14753	27323	1.15	3.0E-43	AJ276230.1	NT	y908a05.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31363 5' similar to contains MER10
3630	16233	26708	1.25	3.0E-43	S69002.1	NT	repetitive element;
4378	16965	29411	0.9	3.0E-43	AA548154.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
6498	19099	31883	2.08	3.0E-43	7305360	NT	H. sapiens gene encoding La autoantigen
6498	19099	31884	2.08	3.0E-43	7305360	NT	Homo sapiens mRNA for partial phospholipase D1, splice variant PLD1a/b2
6827	19417	32233	3.71	3.0E-43	U65467.1	NT	AML1-EVI-1-AML1-EVI-1 fusion protein (rearranged translocation) [human, leukemic cell line SKH1, mRNA Mutant, 5038 nt]
8104	20645		8.03	3.0E-43	AA458824.1	EST_HUMAN	n45cd06.s1 NCL_CGAP_P17 Homo sapiens cDNA clone IMAGE:1017419
8754	21293	34213	1.59	3.0E-43	7661721	NT	Mus musculus otogelin (Otog), mRNA
9778	22278	35261	0.77	3.0E-43	11420217	NT	Mus musculus otogelin (Otog), mRNA
11572	24019	37098	2.8	3.0E-43	5730038	NT	Human ribosomal RNA upstream binding transcription factor (UBTF) gene, partial cds
							sa88f11.s1 Striatum fetal retina 937202 Homo sapiens cDNA clone IMAGE:838413 3' similar to contains
							THIR.12 THR repetitive element;
							Homo sapiens hypothetical protein (HSA011910), mRNA
							Homo sapiens similar to ornithine carbonyltransferase (H. sapiens) (LOC33848), mRNA
							Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA

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186	12856		9.15	2.0E-43	AI180794.1	EST_HUMAN	q081c08.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1733988 3' similar to contains PTR7.
6801	19188	32003	0.95	2.0E-43	BE222778.1	EST_HUMAN	PTR7 PTR7 repetitive element;
6801	19188	32004	0.95	2.0E-43	BE222778.1	EST_HUMAN	nu53a08.x1 NC1_CGAP_Bm41 Homo sapiens cDNA clone IMAGE:3173750 3' similar to contains element
7320	19847	32707	1.12	2.0E-43	AW207390.1	EST_HUMAN	MER40 repetitive element;
8250	20791		0.68	2.0E-43	U43701.1	NT	nu53a08.x1 NC1_CGAP_Bm41 Homo sapiens cDNA clone IMAGE:3173750 3' similar to contains element
11079	23591		3.66	2.0E-43	T03007.1	EST_HUMAN	MER40 repetitive element;
1680	14282	26817	2.54	1.0E-43	AF154838.1	NT	UHLB11-efi-e-08-Q-U1.s1 NC1_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2721712 3'
1680	14282	26818	2.54	1.0E-43	AF154838.1	NT	Human ribosomal protein L23a mRNA, complete cds
1743	14333	26879	1.63	1.0E-43	AL163284.2	NT	FB1G5 Fetal brain, Stratiogene Homo sapiens cDNA clone FB1G5 3'end similar to LINE-1
2750	15305	27669	4.08	1.0E-43	BF348283.1	EST_HUMAN	Homo sapiens Ras-like GTP-binding protein (RAB27A) gene, exons 1b and 2
6723	18317	32120	9.22	1.0E-43	4507168	NT	Homo sapiens Ras-like GTP-binding protein (RAB27A) gene, exons 1b and 2
6723	18317	32121	9.22	1.0E-43	4507168	NT	Homo sapiens chromosome 21 segment HS21C084
7046	18068	30458	1.8	1.0E-43	R19751.1	EST_HUMAN	602022313F1 NC1_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4157668 5'
7873	20415	33323	1.04	1.0E-43	AF175265.1	NT	Homo sapiens Sp4 transcription factor (SP4) mRNA
8010	20552		2.79	1.0E-43	AF198490.1	NT	Homo sapiens Sp4 transcription factor (SP4) mRNA
8771	21310	34233	26.95	1.0E-43	AW963676.1	EST_HUMAN	y940e01.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:34732 5' similar to
10191	22888	35679	0.65	1.0E-43	AW953228.1	EST_HUMAN	SP:BD38_MOUSE P28658 BRAIN PROTEIN DN38;
10843	23364	36380	8.02	1.0E-43	A894861.1	EST_HUMAN	Homo sapiens vacuolar sorting protein 35 (VPS35) mRNA, complete cds
11244	23774	36831	3.74	1.0E-43	11424378	NT	Homo sapiens 8q22.1 region and MTG8 (CBFA2T1) gene, partial cds
11757	24152		1.95	1.0E-43	AL137964.1	EST_HUMAN	EST1375749 IMAGE resequences, MAGH Homo sapiens cDNA
12054	24337	30698	3.9	1.0E-43	AI875416.1	EST_HUMAN	EST1365299 IMAGE resequences, MAGB Homo sapiens cDNA
12288	24488	30942	4.3	9.0E-44	11418322	NT	w87h01.x1 NC1_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2494705 3'
923	13536	26054	5.83	8.0E-44	A1222885.1	EST_HUMAN	Homo sapiens calcium channel, voltage-dependent, alpha 1E subunit (CACNA1E), mRNA
923	13536	26055	5.83	8.0E-44	A1222885.1	EST_HUMAN	DKFZp781D1015_r1_761 (synonym: harny2) Homo sapiens cDNA clone DKFZp781D1015 5'
5424	17981	30388	0.69	8.0E-44	A1381520.1	EST_HUMAN	w88804.x1 NC1_CGAP_Pz28 Homo sapiens cDNA clone IMAGE:2313775 3'
8478	21015	33931	2.74	8.0E-44	X94354.1	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
11043	23557	36593	3.86	8.0E-44	Y10498.2	NT	q123g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1845552 3'
11538	23984	37058	1.86	8.0E-44	L29139.1	NT	q123g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1845552 3'
12008	24310	30692	2.76	8.0E-44	11527389	NT	ta76c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2092622 3' similar to TR:P03107
							P03107 PF20.;
							H. sapiens DNA for Cone cGMP-PDE gene
							Homo sapiens mRNA for thymidine kinase, partial
							Homo sapiens myosin mRNA, partial cds
							Homo sapiens polymerase (RNA) II (DNA directed) polypeptide F (POLR2F), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12419	24859	30703	2.39	8.0E-44	11418009	NT	Homo sapiens protein kinase C, alpha binding protein (PRKCABP), mRNA
687	13311		0.83	7.0E-44	R06035.1	EST_HUMAN	ye88e01.r1 Soares fetal liver spleen 1NPLS Homo sapiens cDNA clone IMAGE:124920 5'
2278	14850	27428	1.12	7.0E-44	5031888	NT	Homo sapiens LIM domain-containing preferred translocation partner in lipoma (LPP) mRNA
2893	15609	28088	2.84	7.0E-44	AF048729.1	NT	Homo sapiens minisatellite ms32 repeat region
2893	15609	28088	2.84	7.0E-44	AF048729.1	NT	Homo sapiens minisatellite ms32 repeat region
3929	16527	28094	2.78	7.0E-44	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4328	16912	29354	0.96	7.0E-44	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
4328	16912	29355	0.96	7.0E-44	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
8126	20697	33576	6.38	7.0E-44	AU159839.1	EST_HUMAN	AU159839 Y78AA1 Homo sapiens cDNA clone Y78AA1000488 3'
6252	18861	31833	0.77	6.0E-44	Z20946.1	EST_HUMAN	HSAADDEYU P, Human foetal Brain Whole tissue Homo sapiens cDNA
11611	24054	37118	2.82	6.0E-44	AW954050.1	EST_HUMAN	EST368120 MAGE resequences, MAGE Homo sapiens cDNA
325	12979		3.12	5.0E-44	AJ289880.1	NT	Homo sapiens KIAA0851 gene (partial), X13 gene and LZTFL1 gene
354	13003		1.75	5.0E-44	AJ289880.1	NT	Homo sapiens KIAA0851 gene (partial), X13 gene and LZTFL1 gene
7829	20371	33278	3.5	5.0E-44	AJ569523.1	EST_HUMAN	tn40d02.x1 NCI_CGAP_Bm26 Homo sapiens cDNA clone IMAGE:2170083 3' similar to contains OFR.1
8306	21909		1.85	5.0E-44	AJ124571.1	EST_HUMAN	OFR OFR repetitive element
3461	16098	28541	2.18	4.0E-44	AL163303.2	NT	AU124571 NT2RM4 Homo sapiens cDNA clone NT2RM4000218 5'
5158	17727		1.16	4.0E-44	AL435225.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C103
8215	20756	33670	0.76	4.0E-44	L21948.1	NT	tf11d02.x1 NCI_CGAP_Pen1 Homo sapiens cDNA clone IMAGE:2130147 3'
8811	21350		0.54	4.0E-44	BE176818.1	EST_HUMAN	Human fibrillin (FBN1) locus polymorphism
11117	23626	36688	7.04	4.0E-44	U90878.1	NT	RC3-H1T0585-010400-023-408 HT0585 Homo sapiens cDNA
1821	14410		1.09	3.0E-44	6912477	NT	Homo sapiens carboxyl terminal LIM domain protein (CLIM1) mRNA, complete cds
3132	15746	28215	5.8	3.0E-44	AA169851.1	EST_HUMAN	Homo sapiens karyopherin alpha 6 (Importin alpha 7) (KPNAB6), mRNA
3959	19557	28028	2.94	3.0E-44	AA337234.1	EST_HUMAN	zp18b05.r1 Strazegene fetal retina 937202 Homo sapiens cDNA clone IMAGE:608777 5'
5404	17982	30373	2.57	3.0E-44	BF881060.1	EST_HUMAN	EST42289 Endometrial tumor Homo sapiens cDNA 5' end similar to similar to alpha-1-antitrypsinase F
9438	21984	34913	0.68	3.0E-44	AF005273.1	NT	602247108F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4332195 5'
1087	13692	26201	2.13	2.0E-44	4826885	NT	Sus scrofa domestica submaxillary apomucin mRNA, complete cds
1087	13692	26202	2.13	2.0E-44	4826885	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 1 (DDX1) mRNA
1249	13848	26363	2.99	2.0E-44	5903200	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 1 (DDX1) mRNA
1249	13848	26364	2.89	2.0E-44	5903200	NT	Homo sapiens transmembrane trafficking protein (TMP21), mRNA
1355	13949	26475	4.41	2.0E-44	AF133588.1	NT	Homo sapiens transmembrane trafficking protein (TMP21), mRNA
1412	14005	26533	1.38	2.0E-44	BE465325.1	EST_HUMAN	Homo sapiens RAB38 (RAB38) mRNA, complete cds
							hw14q08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182838 3' similar to SW:OXYB_HUMAN
							P22059 OXYSTEROL-BINDING PROTEIN. ;

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Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2188	14772	27348	1.71	2.0E-44	AF070851.1	NT	Homo sapiens tissue-type bone marrow zinc finger protein 4 mRNA, complete cds
2841	15200		2.07	2.0E-44	5801833	NT	Homo sapiens adaptor-related protein complex 4, sigma 1 subunit (CLAPS4), mRNA
3517	16122	28602	1.34	2.0E-44	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4688	17251	29703	1.88	2.0E-44	AW884379.1	EST_HUMAN	PMA-SN0016-120500-003-804 SN0016 Homo sapiens cDNA
5441	17888	30401	1.08	2.0E-44	4506378	NT	Homo sapiens mitogen-activated protein kinase kinase kinase 3 (MAP4K3), mRNA
6245	18854	31625	1.71	2.0E-44	11449801	NT	Homo sapiens chemokine (C-C motif) receptor 9 (CCR9), mRNA
6841	18049	30471	1.05	2.0E-44	AF038888.1	NT	Homo sapiens general transcription factor 2-1 (GTF2i) mRNA, alternatively spliced product, complete cds
7444	18988	32835	4.03	2.0E-44	11418228	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3), mRNA
7444	19088	32838	4.03	2.0E-44	11418228	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3), mRNA
8367	20907	33826	0.86	2.0E-44	7706370	NT	Homo sapiens vesicle transport-related protein (KIAA0917), mRNA
8367	20907	33828	0.85	2.0E-44	7706370	NT	Homo sapiens vesicle transport-related protein (KIAA0917), mRNA
8554	21083	34013	1.47	2.0E-44	BE389058.1	EST_HUMAN	601288914F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3613588 5'
11657	24084		1.8	2.0E-44	BE244802.1	EST_HUMAN	TC8AP1E2795 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TC8A Homo sapiens cDNA clone TC8AP2795
12608	24882		63.7	2.0E-44	11828283	NT	Homo sapiens cat eye syndrome chromosome region, candidate 1 (CECR1), mRNA
58	12738	25205	5.03	1.0E-44	7657334	NT	Homo sapiens Misschapan/NIK-related kinase (MINK), mRNA
58	12738	25208	5.03	1.0E-44	7657334	NT	Homo sapiens Misschapan/NIK-related kinase (MINK), mRNA
606	13234	25708	2.28	1.0E-44	AW853132.1	EST_HUMAN	RC1-CT0249-030300-028-h12 CT0249 Homo sapiens cDNA
1239	13837		1.03	1.0E-44	AW884803.1	EST_HUMAN	RC1-BN0039-110300-012-501 BN0039 Homo sapiens cDNA
1618	14211		4.77	1.0E-44	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
2286	14840	27416	3.03	1.0E-44	AA434554.1	EST_HUMAN	z653402.r1 Soares_tet1_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773763 5' similar to contains THR.13 THR repetitive element :
2286	14840	27417	3.03	1.0E-44	AA434554.1	EST_HUMAN	z653402.r1 Soares_tet1_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773763 5' similar to contains THR.13 THR repetitive element :
2321	15483	27468	1.21	1.0E-44	AA388088.1	EST_HUMAN	z686111.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:729476 5'
2788	15341	27911	1.54	1.0E-44	AF186779.1	NT	Homo sapiens transcription factor IGHM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 8, and synaptophysin genes, complete cds; and L-type calcium channel a2
3788	16388		4.07	1.0E-44	AA455869.1	EST_HUMAN	aa01C09.a1 Soares_NHRIMP_U_S1 Homo sapiens cDNA clone IMAGE:811884 3'
8209	20750	33683	1.33	1.0E-44	AW887073.1	EST_HUMAN	EST379147 MAGC resequences, MAGJ Homo sapiens cDNA
8209	20750	33684	1.33	1.0E-44	AW887073.1	EST_HUMAN	EST379147 MAGC resequences, MAGJ Homo sapiens cDNA
8580	21119	34040	0.94	1.0E-44	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C008
8856	21494	34417	0.68	1.0E-44	AI337183.1	EST_HUMAN	q889p07.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2008628 3'

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10882	23413		11.28	1.0E-44	AV714608.1	EST_HUMAN	AV714608 DCB Homo sapiens cDNA clone DCBBYE03 5'
11404	23855	36821	5.07	1.0E-44	10092894	NT	Homo sapiens Srsf1 domain (SCR repeat) containing (BK65A6.2), mRNA
11460	23910	36976	3.83	1.0E-44	AW846867.1	EST_HUMAN	RC1-CT0188-150988-011-C08 CT0188 Homo sapiens cDNA
11460	23910	36977	3.83	1.0E-44	AW846867.1	EST_HUMAN	RC1-CT0188-150988-011-C08 CT0188 Homo sapiens cDNA
4678	17260	29711	1.31	9.0E-45	8922391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
4678	17260	29712	1.31	9.0E-45	8922391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
6757	18350	32159	1.34	9.0E-45	AB023212.1	NT	Homo sapiens mRNA for KIAA0695 protein, partial cds
2565	15128	27688	6.45	8.0E-45	5174718	NT	Homo sapiens TRK-fused gene (NOTE: non-standard symbol and name) (TFG) mRNA
5241	17805	30228	7.14	8.0E-45	5174718	NT	Homo sapiens TRK-fused gene (NOTE: non-standard symbol and name) (TFG) mRNA
8051	20583	33501	0.84	8.0E-45	AA377985.1	EST_HUMAN	EST80853 Synovial sarcoma Homo sapiens cDNA 5' end
2884	15600		0.99	7.0E-45	AL160131.1	NT	Novel human gene mapping to chromosome 22
4050	16847		6.39	6.0E-45	AW157570.1	EST_HUMAN	al83H07.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782808 3' similar to SW:R13A_HUMAN P40428 60S RIBOSOMAL PROTEIN L13A.1
12885	25083		2	6.0E-45	11418213	NT	Homo sapiens ADP-ribosylation factor GTPase activating protein 1 (ARFGAP1), mRNA
925	13538		1.34	5.0E-45	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
2045	14627	27198	12.03	5.0E-45	BF333627.1	EST_HUMAN	CMA-CH0044-180200-515-01 CH0044 Homo sapiens cDNA
3246	15858	28341	2.25	5.0E-45	AJ523768.1	EST_HUMAN	tg94H07.x1 NCI_OGAP_CLL1 Homo sapiens cDNA clone IMAGE:2116453 3' similar to SW:PAX1_MOUSE P09084 PAIRED BOX PROTEIN PAX-1.1
5703	18328	30832	8.34	5.0E-45	AA397781.1	EST_HUMAN	z172803.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:727877 3' similar to contains element TAR1 repetitive element.1
6170	18782	31548	1.1	5.0E-45	Y18833.1	NT	Homo sapiens MCP-1 gene and enhancer region
6170	18782	31549	1.1	5.0E-45	Y18833.1	NT	Homo sapiens MCP-1 gene and enhancer region
6215	18825	31598	1.15	5.0E-45	AB022318.1	NT	Homo sapiens mRNA for inducible nitric oxide synthase, complete cds
6215	18825	31597	1.15	5.0E-45	AB022318.1	NT	Homo sapiens mRNA for inducible nitric oxide synthase, complete cds
6338	18942	31720	1.82	5.0E-45	11496288	NT	Homo sapiens zinc finger protein 277 (ZNF277), mRNA
6338	18942	31721	1.82	5.0E-45	11496288	NT	Homo sapiens zinc finger protein 277 (ZNF277), mRNA
8218	20759	33673	0.51	5.0E-45	11418704	NT	Homo sapiens bone morphogenetic protein 5 (BMP5), mRNA
8871	21509	34431	1.79	5.0E-45	4759223	NT	Homo sapiens programmed cell death 5 (PDCD5), mRNA
11542	23990	37062	2.92	5.0E-45	8922698	NT	Homo sapiens golgin-like protein (GLP), mRNA
1183	13784	26294	11.57	4.0E-45	X95828.1	NT	H. sapiens ART4 gene
2330	14901	27472	21.18	4.0E-45	BE265022.1	EST_HUMAN	601184440F1 NIH_MGC 7 Homo sapiens cDNA clone IMAGE:3538425 5'
4605	17188	28635	0.88	4.0E-45	4759249	NT	Homo sapiens TRAF family member-associated NFB activator (TANK) mRNA
8888	21424		0.86	4.0E-45	AA226220.1	EST_HUMAN	nc28607.s1 NCI_OGAP_P11 Homo sapiens cDNA clone IMAGE:1009284 similar to contains element L1 repetitive element.1

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11628	24071		2.17	4.0E-45	BE044076.1	EST_HUMAN	h036h04.x1 NCL_CGAP_UH1 Homo sapiens cDNA clone IMAGE:3030511 3' similar to contains MER29.b3
11673	25008	30613	1.88	4.0E-45	11435947	NT	MER29 repetitive element;
12278	24482		2.14	4.0E-45	BF676077.1	EST_HUMAN	Homo sapiens chromosome 12 open reading frame 3 (G12ORF3), mRNA
4161	15882		1.32	3.0E-45	T71480.1	EST_HUMAN	60208.40525F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248253 5'
6383	18987	31787	1.29	3.0E-45	6753651	NT	y03507.r1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:110245 5'
6383	18987	31788	1.28	3.0E-45	6753651	NT	Mus musculus dynein, exon, heavy chain 11 (Dnahtc11), mRNA
8386	20828		1.29	3.0E-45	AV723976.1	EST_HUMAN	Mus musculus dynein, exon, heavy chain 11 (Dnahtc11), mRNA
8728	21265	34185	3.78	3.0E-45	4758451	NT	AV723976 HTB Homo sapiens cDNA clone HTBAAG01 5'
10209	22704	35696	11.34	3.0E-45	AL163227.2	NT	Homo sapiens golgi subunit, golgin subfamily a, 2 (GOLGA2), mRNA
10209	22704	35697	11.34	3.0E-45	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
2547	15111		4.13	2.0E-45	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
3087	15882	28164	0.89	2.0E-45	AL243213.1	NT	Homo sapiens partial 5-HT4 receptor gene, exons 2 to 5
6844	19240	32043	5.46	2.0E-45	L01685.1	NT	
7805	20118	32894	1.35	2.0E-45	BE782184.1	EST_HUMAN	Human eosinophil Charcot-Leyden crystal (CLC) protein (lysophospholipase) gene, promoter and exon 1
8354	20894	33815	0.75	2.0E-45	AW834834.1	EST_HUMAN	601467783F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3870838 5'
10682	24788	36225	28.86	2.0E-45	BE934350.1	EST_HUMAN	RCO-LT0001-160200-032-d11 LT0001 Homo sapiens cDNA
							MR0-HT0923-190800-201-e02 HT0923 Homo sapiens cDNA
							aa87H12J1 Strabagene fetal retina 837202 Homo sapiens cDNA clone IMAGE:838319 5' similar to
11055	23567	36803	5.39	2.0E-45	AA468770.1	EST_HUMAN	TR:G1144589 G1144589 R-SLY1 ;
11378	23830	36802	2.33	2.0E-45	AW270280.1	EST_HUMAN	xp72a03.x1 NCL_CGAP_Ov40 Homo sapiens cDNA clone IMAGE:2745888 3'
11378	23830	36803	2.33	2.0E-45	AW270280.1	EST_HUMAN	xp72a03.x1 NCL_CGAP_Ov40 Homo sapiens cDNA clone IMAGE:2745888 3'
12549	24653		2.42	2.0E-45	11418157	NT	Homo sapiens calcium channel, voltage-dependent, alpha 11 subunit (CACNA11), mRNA
129	13067		2.71	1.0E-45	BE389855.1	EST_HUMAN	601284380F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3606183 6'
434	13067		3.24	1.0E-45	BE389855.1	EST_HUMAN	601284380F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3606183 5'
488	13130	25619	1.61	1.0E-45	4508412	NT	Homo sapiens RAP1A, member of RAS oncogene family (RAP1A), mRNA
1216	13818	26331	1.54	1.0E-45	7857280	NT	Homo sapiens Langerhans cell specific c-type lectin (LANGERIN), mRNA
3137	15751	28219	10.2	1.0E-45	U32168.1	NT	Human pro-a2 chain of collagen type XI (COL11A2) gene, complete cds
3539	16144	28827	0.88	1.0E-45	8658558	NT	Homo sapiens chromosome 21 open reading frame 1 (C21orf4), mRNA
3632	16235	28710	0.68	1.0E-45	AB046811.1	NT	Homo sapiens mRNA for KIAA1501 protein, partial cds
4575	17158	29802	5.67	1.0E-45	BE396833.1	EST_HUMAN	601289110F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3818803 5'
5335	17898	30311	11.79	1.0E-46	7706128	NT	Homo sapiens oxysterol 7alpha-hydroxylase (CYP39A1), mRNA
7874	20516	33422	0.71	1.0E-45	11422236	NT	Homo sapiens peroxisomal biogenesis factor 14 (PEX14), mRNA
7974	20516	33423	0.71	1.0E-45	11422236	NT	Homo sapiens peroxisomal biogenesis factor 14 (PEX14), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8543	21082	34003	0.88	1.0E-45	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
9049	21598	34517	4.07	1.0E-45	BE887843.1	EST_HUMAN	601511226F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3812535 5'
9441	21987	34916	0.98	1.0E-45	AB002297.1	NT	Human mRNA for KIAA0288 gene, partial cds
11875	24225	31045	4.89	1.0E-45	11418068	NT	Homo sapiens protein Kinase C, alpha binding protein (PRKCABP), mRNA
12063	24346		9.84	1.0E-45	11526291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
12068	24349		10.36	1.0E-45	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12513	24632	30885	3.48	1.0E-45	11418157	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1I subunit (CACNA1I), mRNA
8170	20711	33628	1.87	9.0E-46	9910253	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
8569	21108		6.51	9.0E-46	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
10374	22868	35981	10.22	9.0E-46	AW246884.1	EST_HUMAN	2822449.5ptm NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822449 5'
2488	15051	27622	9.69	8.0E-46	AI433261.1	EST_HUMAN	83208.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2132189 3' similar to gb:J00314_mae2
2488	15051	27623	9.69	8.0E-46	AI433261.1	EST_HUMAN	TUBULIN BETA-1 CHAIN (HUMAN);
7998	20540		6.07	8.0E-46	BE187244.1	EST_HUMAN	RC3-HT0506-280200-012-C12 HT0506 Homo sapiens cDNA
11513	23981		2.87	8.0E-46	11419729	NT	Homo sapiens ribosomal protein L44 (RPL44), mRNA
2280	14854	27432	1.07	7.0E-46	U46007.1	NT	Rattus norvegicus esph mRNA, complete cds
4980	17262		6.38	7.0E-46	BE386165.1	EST_HUMAN	601277292F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618119 5'
4928	17604		0.98	7.0E-46	BE084388.1	EST_HUMAN	RC4-B10310-110300-015-f10 B10310 Homo sapiens cDNA
6193	18803	31572	3.72	7.0E-46	8922708	NT	Homo sapiens hypothetical protein FLJ10847 (FLJ10847), mRNA
6820	19217	32022	1.29	7.0E-46	BF105945.1	EST_HUMAN	601822835F1 NIH_MGC_77 Homo sapiens cDNA clone IMAGE:4042738 5'
12203	24428		1.6	7.0E-46	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2763	15336	27806	3.13	6.0E-46	AJ884381.1	EST_HUMAN	wm3108.x1 NCI_CGAP_U44 Homo sapiens cDNA clone IMAGE:2437575 3' similar to contains MER19.12
2763	15336	27807	3.13	6.0E-46	AJ884381.1	EST_HUMAN	MER19 repetitive element;
6278	18898	31655	9.32	6.0E-46	AJ835448.1	EST_HUMAN	wm3108.x1 NCI_CGAP_U44 Homo sapiens cDNA clone IMAGE:2437575 3' similar to contains MER19.12
7289	19797	32853	0.83	6.0E-46	AW513244.1	EST_HUMAN	ts58h10.x1 NCI_CGAP_Ku8 Homo sapiens cDNA clone IMAGE:2232835 3' similar to TR-O60363 O60363
11268	23006		2.81	6.0E-46	BE784971.1	EST_HUMAN	XP42604.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2708854 3' similar to gb:U08089 DNAJ
218	12879		5.85	5.0E-46	AL163210.2	NT	PROTEIN HOMOLOG 2 (HUMAN);
3581	16185	28687	1.37	5.0E-46	BE677194.1	EST_HUMAN	601478409F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3880895 5'
3581	16185	28688	1.37	5.0E-46	BE677194.1	EST_HUMAN	601478409F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3880895 5'
3581	16185	28688	1.37	5.0E-46	BE677194.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
3581	16185	28688	1.37	5.0E-46	BE677194.1	EST_HUMAN	7d81g01.x1 Lupsid_dorsal_root_ganglion Homo sapiens cDNA clone IMAGE:3279408 3'
3581	16185	28688	1.37	5.0E-46	BE677194.1	EST_HUMAN	7d81g01.x1 Lupsid_dorsal_root_ganglion Homo sapiens cDNA clone IMAGE:3279408 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6833	19423	32239	1.83	5.0E-46	BF590442.1	EST_HUMAN	ncs3807.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3258757 3' similar to TR:075202
7021	19555	32380	3.81	5.0E-46	BF347229.1	EST_HUMAN	075202 HOMOLOG OF RAT KIDNEY-SPECIFIC ;
7152	19884	32528	0.74	5.0E-46	AW582253.1	EST_HUMAN	602021164F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156070 5'
9533	22033	34982	0.46	5.0E-46	AA398381.1	EST_HUMAN	QV4-ST0212-120100-075-09 ST0212 Homo sapiens cDNA
689	13283		1.73	4.0E-46	AA601143.1	EST_HUMAN	262c08.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:726828 3'
1741	14331	26875	3.98	4.0E-46	AW770544.1	EST_HUMAN	nc54609.s1 NCI_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1104520 3' similar to gb:X53741_ma1 FIBULIN-1, ISOFORM A PRECURSOR (HUMAN);
1741	14331	26875	3.98	4.0E-46	AW770544.1	EST_HUMAN	H86c03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3008836 3' similar to gb:X14008_ma1 LYSOZYME C PRECURSOR (HUMAN); contains element MER37 repetitive element ;
1741	14331	26876	3.98	4.0E-46	AW770544.1	EST_HUMAN	H86c03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3008836 3' similar to gb:X14008_ma1 LYSOZYME C PRECURSOR (HUMAN); contains element MER37 repetitive element ;
2787	15321	27887	3.11	4.0E-46	MT8048.1	NT	Human endogenous retrovirus RTVL-H2
5628	18257	30727	2.09	4.0E-46	M36852.1	NT	Human Ig germline gamma-3 heavy-chain gene V region, partial cds
5628	18257	30728	2.09	4.0E-46	M36852.1	NT	Human Ig germline gamma-3 heavy-chain gene V region, partial cds
12332	24516	30821	1.86	4.0E-46	AB002059.1	NT	Homo sapiens DNA for Human P2X4, complete cds
4482	17087	29517	0.81	3.0E-46	4506376	NT	Homo sapiens mitogen-activated protein kinase kinase kinase 3 (MAP4K3), mRNA
4889	17464	29818	0.98	3.0E-46	Z73680.1	NT	H. sapiens Ig lambda light chain variable region gene (7c.11.2) germline; Ig-Lambda; VLambda
4889	17464	29819	0.98	3.0E-46	Z73680.1	NT	H. sapiens Ig lambda light chain variable region gene (7c.11.2) germline; Ig-Lambda; VLambda
8684	21223	34143	7.65	3.0E-46	AI631482.1	EST_HUMAN	vj49c04.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THR.b2 THR repetitive element ;
8935	21473	34392	0.58	3.0E-46	L08850.1	NT	Human AD amyloid mRNA, complete cds
8935	21473	34393	0.58	3.0E-46	L08850.1	NT	Human AD amyloid mRNA, complete cds
11446	23898	36961	3.14	3.0E-46	D31755.1	NT	Human mRNA for KIAA0061 gene, partial cds
870	13485	26000	8.24	2.0E-46	AA468848.1	EST_HUMAN	nc03a09.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:880408 3' similar to contains THR.b2 THR repetitive element ;
1608	14201		1.41	2.0E-46	AA678248.1	EST_HUMAN	2d27a11.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:431686 3'
1683	14275	26808	2.17	2.0E-46	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
5110	17682	30119	1.2	2.0E-46	AA398288.1	EST_HUMAN	zfs9a02.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:726850 5' similar to SW:RSP1_MOUSE Q01730 RSP-1 PROTEIN. ;

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7497	20020	32884	6.85	2.0E-46	9910569	NT	Mus musculus sperm tail associated protein (Stap), mRNA
8014	20556		1.81	2.0E-46	BE869151.1	EST_HUMAN	601445137F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3849287 5'
11125	23633		1.56	2.0E-46	7857233	NT	Homo sapiens small acidic protein (IMAGE145052), mRNA
11802	24963		1.74	2.0E-46	BF028854.1	EST_HUMAN	601765225F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3997328 5'
12094	24361		1.43	2.0E-46	AA001788.1	EST_HUMAN	zh84f12.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:428016 5'
12408	24846	30800	5.28	2.0E-46	AW277214.1	EST_HUMAN	xq78h03.x1 NCI_CGAP_Lu34 Homo sapiens cDNA clone IMAGE:2759789 3'
1278	13871	26391	5.79	1.0E-46	4502694	NT	Homo sapiens cell division cycle 10 (homologous to CDC10 of S. cerevisiae) (CDC10) mRNA
2320	14892	27467	4.58	1.0E-46	AW978516.1	EST_HUMAN	EST380825 MAGE resequencer, MAGP Homo sapiens cDNA
2443	15010	27562	2.81	1.0E-46	H97330.1	EST_HUMAN	EST485095 WATM1 Homo sapiens cDNA clone 485095
3286	15897	28376	22.33	1.0E-46	AA631912.1	EST_HUMAN	np78b02.a1 NCI_CGAP_P12 Homo sapiens cDNA clone IMAGE:1132395 similar to gb:X76717 H. sapiens MT-11 mRNA. (HUMAN);
4989	17572		3.21	1.0E-46	AB023197.1	NT	Homo sapiens mRNA for KIAA0680 protein, partial cds
5878	18500	31228	11.77	1.0E-46	BF104707.1	EST_HUMAN	7c92b01.x1 NCI_CGAP_Oy18 Homo sapiens cDNA clone IMAGE:3943705 3'
6131	24757	31500	4.79	1.0E-46	8923762	NT	Homo sapiens centaurin-alpha 2 protein (HSA272195), mRNA
6131	24757	31501	4.79	1.0E-46	8923762	NT	Homo sapiens centaurin-alpha 2 protein (HSA272195), mRNA
6725	19319	32124	0.72	1.0E-46	BF108247.1	EST_HUMAN	7n48607.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3567652 3' similar to contains element
10742	18500	31228	4.43	1.0E-46	BF104707.1	EST_HUMAN	MER22 repetitive element
11831	24196	31035	1.97	1.0E-46	BF531102.1	EST_HUMAN	7c92b01.x1 NCI_CGAP_Oy18 Homo sapiens cDNA clone IMAGE:3943705 3'
11831	24196	31036	1.97	1.0E-46	BF531102.1	EST_HUMAN	602072284F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4215398 5'
12628	24704		1.39	1.0E-46	AV715377.1	EST_HUMAN	602072284F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4215398 5'
798	13415		3.32	9.0E-47	AJ271735.1	NT	AV715377 DC8 Homo sapiens cDNA clone DC8AIE03 5'
5085	17638	30081	2.39	9.0E-47	AW770928.1	EST_HUMAN	Homo sapiens Xq pseudautosomal region; segment 1/2
6514	19114	31903	0.78	9.0E-47	11425439	NT	H83604.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3009534 3' similar to TR-O75703 O75703 HYPOTHETICAL 12.4 KD PROTEIN ;
12355	24951	30627	3.84	9.0E-47	11417688	NT	Homo sapiens zinc finger protein ZNF286 (ZNF286), mRNA
1844	14432	26985	18.42	8.0E-47	V18536.1	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
1844	14432	26986	18.42	8.0E-47	V18536.1	NT	Homo sapiens HLA-C gene, exon 5, individual 19323
2742	15297	27884	1.1	8.0E-47	5453955	NT	Homo sapiens HLA-C gene, exon 5, individual 19323
3058	15874	28150	2.05	8.0E-47	AJ228043.1	NT	Homo sapiens protein phosphatase 2, regulatory subunit B (B56), epsilon isoform (PPP2R5E) mRNA
3686	16287	28756	0.8	8.0E-47	AB041826.1	NT	Homo sapiens 959 kb contig between AM11 and CBR1 on chromosome 21q22, segment 3/3
3686	16287	28757	0.8	8.0E-47	AB041826.1	NT	Homo sapiens mRNA for GCK family kinase MINK-2, complete cds
12436	24845		1.55	7.0E-47	AV683284.1	EST_HUMAN	Homo sapiens mRNA for GCK family kinase MINK-2, complete cds
							AV683284 GKC Homo sapiens cDNA clone GKCASH11 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9200	21717	34681	6.33	6.0E-47	AI695189.1	EST_HUMAN	tz98h02.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2269559 3'
9828	22128	35091	0.69	6.0E-47	AB042824.1	NT	Homo sapiens RECOL5 beta mRNA for DNA helicase recQ5 beta, complete cds
9828	22128	35082	0.69	6.0E-47	AB042824.1	NT	Homo sapiens RECOL5 beta mRNA for DNA helicase recQ5 beta, complete cds
6691	19287	32060	5.97	5.0E-47	11423972	NT	Homo sapiens CDC37 (cell division cycle 37, S. cerevisiae, homolog) (CDC37), mRNA
10674	23208		4.82	5.0E-47	M78590.1	EST_HUMAN	EST100738 Fetal brain, Strategene (cat#836208) Homo sapiens cDNA clone HFBCF07
1445	14037	26567	3.92	4.0E-47	4557558	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
6820	19579	32408	0.94	4.0E-47	BE938896.1	EST_HUMAN	MIR4-TN0108-280800-201-404 TN0108 Homo sapiens cDNA
8417	20957	33874	2.47	4.0E-47	BE618483.1	EST_HUMAN	601280486F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3622437 5'
8417	20957	33875	2.47	4.0E-47	BE618483.1	EST_HUMAN	601280486F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3622437 5'
8553	21092	34012	0.57	4.0E-47	AW983777.1	EST_HUMAN	RC3-BN0034-220300-015-805 BN0034 Homo sapiens cDNA
11494	23943		6.19	4.0E-47	AW515508.1	EST_HUMAN	xc98h07.x1 NCI_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2848597 3' similar to SW:INT8_MOUSE
570	13201	25682	3.11	3.0E-47	BE907634.1	EST_HUMAN	Q84252 VIRAL INTEGRATION SITE PROTEIN INT-6, [1];
570	13201	25683	3.11	3.0E-47	BE907634.1	EST_HUMAN	601497639F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3899721 5'
851	13467	25678	5.09	3.0E-47	N57483.1	EST_HUMAN	601497639F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3899721 5'
981	13593	28108	9.88	3.0E-47	AL163284.2	NT	yf5-h04.s1 Soares_multiple_sclerosis_2NIHIMSP Homo sapiens cDNA clone IMAGE:277327 3'
3343	16953	28429	0.77	3.0E-47	4504116	NT	Homo sapiens chromosome 21 segment HS21C084
4038	16638		5.04	3.0E-47	U83181.1	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
6163	18776	31538	4.81	3.0E-47	AW408800.1	EST_HUMAN	Homo sapiens nuclear dual-specificity phosphatase (SBF1) mRNA, partial cds
6163	18778	31539	4.81	3.0E-47	AW408800.1	EST_HUMAN	UI-HF-BMD-edx-d-07-Q-UI1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3083205 5'
6680	18278		1.71	3.0E-47	AI222413.1	EST_HUMAN	UI-HF-BMD-edx-d-07-Q-UI1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3083205 5'
7416	18941	32806	0.75	3.0E-47	AB1819755.1	EST_HUMAN	qto4e07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843718 3'
7416	18941	32807	0.75	3.0E-47	AB1819755.1	EST_HUMAN	wj11h08.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2402559 3'
8767	21306	34228	0.58	3.0E-47	AW983798.1	EST_HUMAN	wj11h08.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2402559 3'
8767	21308	34229	0.58	3.0E-47	AW983798.1	EST_HUMAN	EST1375889 MAGC resequences, MAGH Homo sapiens cDNA
159	12822	28310	1.38	2.0E-47	4505318	NT	EST1375889 MAGC resequences, MAGH Homo sapiens cDNA
1003	13614	28127	2.14	2.0E-47	AL163209.2	NT	Homo sapiens myosin phosphatase, target subunit 2 (MYPT2), mRNA
1003	13614	28128	2.14	2.0E-47	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
1613	14208		1.1	2.0E-47	AB98279.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C009
1637	14229	28762	1.07	2.0E-47	7682109	NT	wp98h02.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2478551 3'
1717	14309	28848	3.75	2.0E-47	AA524514.1	EST_HUMAN	Homo sapiens KIAA0426 gene product (KIAA0426), mRNA
4439	17025	28465	1.88	2.0E-47	4504888	NT	ng43h12.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937607 3'
4473	17059	29506	1.91	2.0E-47	AA589592.1	EST_HUMAN	Homo sapiens thym finger protein (C3HC4 type) 8 (RNFB), mRNA
4473	17059	29507	1.91	2.0E-47	AA589592.1	EST_HUMAN	rf23g07.s1 NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE:914652
4473	17059	29507	1.91	2.0E-47	AA589592.1	EST_HUMAN	rf23g07.s1 NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE:914652

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4804	17187	28634	2.94	2.0E-47	5174848	NT	Homo sapiens RawRex activation domain binding protein-related (RAB-R) mRNA
4935	17510	28667	1.28	2.0E-47	AW065168.1	EST_HUMAN	EST177239 IMAGE resequences, MAGI Homo sapiens cDNA
5856	18578	31312	0.83	2.0E-47	AF073921.1	NT	Homo sapiens regulator of G-protein signaling 6 variant form (RGS6) mRNA, complete cds
6130	18745	31488	1.48	2.0E-47	BE778475.1	EST_HUMAN	601463932F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3887487 5'
6130	18745	31499	1.48	2.0E-47	BE778475.1	EST_HUMAN	601463932F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3887487 5'
7888	24788		1.25	2.0E-47	D87731.1	NT	Homo sapiens 5-hydroxytryptamine 1D receptor pseudogene with an Alu repeat insertion
7905	20447	33353	1.74	2.0E-47	D87875.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
7905	20447	33354	1.74	2.0E-47	D87875.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
8852	21191	34108	1.77	2.0E-47	AF071771.1	NT	Homo sapiens SPH-binding factor mRNA, partial cds
9410	21919	34867	1.33	2.0E-47	11526138	NT	Homo sapiens BTG family, member 3 (BTG3), mRNA
11863	24894	30808	2.82	2.0E-47	R42423.1	EST_HUMAN	y62608.s1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:28866 3' similar to contains OFR repetitive element;
1451	14043	26571	0.05	1.0E-47	AB333429.1	EST_HUMAN	qp0903.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1931189 3'
3884	18493	28953	0.93	1.0E-47	BE280477.1	EST_HUMAN	601155321F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138893 5'
3884	18493	28954	0.93	1.0E-47	BE280477.1	EST_HUMAN	601155321F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138893 5'
5235	17788	30218	2.44	1.0E-47	AW813906.1	EST_HUMAN	RC3-ST0197-130400-017-402 ST0197 Homo sapiens cDNA
7109	19449	32265	5.59	1.0E-47	AB880888.1	EST_HUMAN	at19606.x1 Barstead aorta HPLRB8 Homo sapiens cDNA clone IMAGE:2355588 3' similar to gb:M22885
8802	21341		7.08	1.0E-47	AW884848.1	EST_HUMAN	RAS-RELATED PROTEIN RAP-1A (HUMAN);
10258	22753	35741	2.08	1.0E-47	L30115.1	NT	KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
1654	14246	28779	2.38	9.0E-48	AF223391.1	NT	Papillo hemadys alcohol dehydrogenase class I (ADH) gene, 5' region
3812	18215	28895	0.78	9.0E-48	BF358947.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
5880	19482	31205	0.83	9.0E-48	BE888198.1	EST_HUMAN	CM2-MT0100-310700-290-05 MT0100 Homo sapiens cDNA
5880	19482	31206	0.83	9.0E-48	BE888198.1	EST_HUMAN	601511714F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913108 5'
6373	18977	31755	0.89	9.0E-48	ALU123240.1	EST_HUMAN	601511714F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913108 5'
10895	23508	36542	3.37	9.0E-48	BE393813.1	EST_HUMAN	ALU123240 NT2RM1 Homo sapiens cDNA clone NT2RM1000978 5'
1293	13888		2.34	8.0E-48	4501900	NT	601310479F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3632083 5'
1294	13888		1.76	8.0E-48	4501900	NT	Homo sapiens aminocyclase 1 (ACY1), mRNA
3189	15783	28254	3.3	8.0E-48	AW788477.1	EST_HUMAN	Homo sapiens aminocyclase 1 (ACY1), mRNA
3189	15783	28255	3.3	8.0E-48	AW788477.1	EST_HUMAN	h181503.x1 NCI CGAP_Lym12 Homo sapiens cDNA clone IMAGE:3001133 3' similar to gb:X64707
							BREAST BASIC CONSERVED PROTEIN 1 (HUMAN);
							h181503.x1 NCI CGAP_Lym12 Homo sapiens cDNA clone IMAGE:3001133 3' similar to gb:X64707
							BREAST BASIC CONSERVED PROTEIN 1 (HUMAN);

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4005	16003	28077	0.6	8.0E-48	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
516	13149		2.03	7.0E-48	AB033035.1	NT	Homo sapiens mRNA for KIAA1208 protein, partial cds
517	13149		20.88	7.0E-48	AB033035.1	NT	Homo sapiens mRNA for KIAA1208 protein, partial cds
1544	14138	26870	1.08	7.0E-48	6912719	NT	Homo sapiens tousel-like kinase 1 (TLK1), mRNA
1679	14271	26804	3.49	7.0E-48	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
6872	16288	32072	21.95	7.0E-48	11418831	NT	Homo sapiens histidyl-RNA synthetase (HARS), mRNA
3658	16281	26733	1.19	6.0E-48	AF781111.1	EST_HUMAN	w68h03.x1 NCI_CGAP_K612 Homo sapiens cDNA clone IMAGE:2398813 3'
6208	18818	31588	0.88	6.0E-48	AB006955.1	NT	Homo sapiens mRNA for AIE-75, complete cds
6881	19615	32450	0.87	6.0E-48	11420885	NT	Homo sapiens BMX non-receptor tyrosine kinase (BMX), mRNA
9051	21588	34520	2.17	6.0E-48	AF026816.1	NT	Homo sapiens putative oncogene protein mRNA, partial cds
9480	21986	34940	1.72	6.0E-48	11427428	NT	Homo sapiens hypothetical protein FLJ11008 (FLJ11008), mRNA
9606	22108	35069	3.5	6.0E-48	AA18080.1	EST_HUMAN	z645b06.s1 Striatogene hNT neuron (8337233) Homo sapiens cDNA clone IMAGE:632627 3' similar to contains Alu repetitive element.
2263	14867	27442	1.43	5.0E-48	4827059	NT	Homo sapiens xylulokinase (H. influenzae) homolog (XYLB) mRNA
2300	14873	27449	1.15	5.0E-48	4827059	NT	Homo sapiens xylulokinase (H. influenzae) homolog (XYLB) mRNA
3350	18002	28435	1.84	5.0E-48	4828891	NT	Homo sapiens phosphodiesterase 1A, calmodulin-dependent (PDE1A) mRNA
5418	17975	30383	1.13	5.0E-48	AF218836.1	NT	Homo sapiens diacylglycerol kinase beta (DGK) gene, exon 32
8511	21050	33972	6.64	5.0E-48	BE064410.1	EST_HUMAN	RC4-BT0311-141189-011-H08 BT0311 Homo sapiens cDNA
10836	23357	36373	4.24	4.0E-48	AI620420.1	EST_HUMAN	tu47a02.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2254154 3'
1428	14021	26549	1.75	3.0E-48	AV690864.1	EST_HUMAN	AV690864 GKC Homo sapiens cDNA clone GKCDRE12 5'
2019	14801	27165	9.63	3.0E-48	4885170	NT	Homo sapiens chromosome X open reading frame 6 (CXORF6) mRNA
2019	14801	27166	9.63	3.0E-48	4885170	NT	Homo sapiens chromosome X open reading frame 6 (CXORF6) mRNA
3465	16072	28545	0.88	3.0E-48	AF172463.1	NT	Homo sapiens opid growth factor receptor mRNA, complete cds
3693	16284	28784	0.76	3.0E-48	AW684531.1	EST_HUMAN	h14b12.x1 NCI_CGAP GU1 Homo sapiens cDNA clone IMAGE:2972255 3' similar to SW:DCRB_HUMAN
4332	18919		0.67	3.0E-48	AA009541.1	EST_HUMAN	P56555 DOWN SYNDROME CRITICAL REGION PROTEIN B. ;
6033	18671	31410	2.98	3.0E-48	BE084571.1	EST_HUMAN	z04g03.r1 Soares fetal_liver_spleen_1NLS_S1 Homo sapiens cDNA clone IMAGE:428844 5'
7087	19658	32497	1.01	3.0E-48	AF087913.1	NT	MIR4-BT0657-060400-201-e10 BT0657 Homo sapiens cDNA
							Human endogenous retrovirus HERV-P-T47D
8330	20871		3.02	3.0E-48	AA658630.1	EST_HUMAN	h03105.s1 NCI_CGAP_P122 Homo sapiens cDNA clone IMAGE:1219137 3' similar to contains PTR5.b1 PTR5 repetitive element ;
10753	23277	36290	6.32	3.0E-48	BF514170.1	EST_HUMAN	UHH-BW1-art-a-10-0-UJ.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3082267 3'
5	12685	26142	2.18	2.0E-48	AA465007.1	EST_HUMAN	z680c03.r1 Soares ovary tumor NIHOT Homo sapiens cDNA clone IMAGE:810052 5'
49	12729	25193	2.12	2.0E-48	AA631940.1	EST_HUMAN	hmf67 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR17-28

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4628	17212	28963	0.93	2.0E-48	BE246065.1	EST_HUMAN	TCBAP1D3842 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP3842
5095	17688	30107	1.8	2.0E-48	T03176.1	EST_HUMAN	FB2E2 Fetal brain, Stragelene Homo sapiens cDNA clone FB2E2 3'end
5096	17689	30108	1.8	2.0E-48	T03176.1	EST_HUMAN	FB2E2 Fetal brain, Stragelene Homo sapiens cDNA clone FB2E2 3'end
7528	20048	32919	4.15	2.0E-48	AB040834.1	NT	Homo sapiens mRNA for KIAA1501 protein, partial cds
7528	20048	32920	4.15	2.0E-48	AB040834.1	NT	Homo sapiens mRNA for KIAA1501 protein, partial cds
7539	20059	32933	3.51	2.0E-48	11496238	NT	Homo sapiens v-rel avian reticuloendotheliosis viral oncogene homolog A (nuclear factor of kappa light polypeptide gene enhancer in B-cells 3 (p65)) (RELA), mRNA
8296	20837	33758	1.53	2.0E-48	AV743451.1	EST_HUMAN	AV743451 CB Homo sapiens cDNA clone CBCCGG10 5'
11828	12885	25142	4.4	2.0E-48	AA465007.1	EST_HUMAN	z680cd03.r1 Soares ovary tumor NIHOT Homo sapiens cDNA clone IMAGE:810052 5'
60	12739	25210	3.22	1.0E-48	7706534	NT	Homo sapiens cisplatin resistance-associated overexpressed protein (LOC51747), mRNA
906	13520	28038	5.3	1.0E-48	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
1114	13718	26228	2.58	1.0E-48	7657430	NT	Homo sapiens EBNA-2 co-activator (100kD) (p100), mRNA
1114	13718	26229	2.58	1.0E-48	7657430	NT	Homo sapiens EBNA-2 co-activator (100kD) (p100), mRNA
1339	13834	28455	4.33	1.0E-48	5032032	NT	Homo sapiens RNA binding motif protein 6 (RBM6) mRNA
1982	14546	27103	19.18	1.0E-48	AL163302.2	NT	Homo sapiens chromosome 21 segment HS21C102
3535	16140	28622	0.81	1.0E-48	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
5312	17874	30296	1.37	1.0E-48	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
6431	19034	31818	1.14	1.0E-48	AI889077.1	EST_HUMAN	bt17c01.x1 NCI_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:2075804 3' similar to TR:O14588 O14588 SIMILARITY TO U73941:
6431	19034	31819	1.14	1.0E-48	AI889077.1	EST_HUMAN	bt17c01.x1 NCI_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:2075804 3' similar to TR:O14588 O14588 SIMILARITY TO U73941:
6626	19222		0.94	1.0E-48	Y18000.1	NT	Homo sapiens NF2 gene
7303	19831	32890	2.58	1.0E-48	4755137	NT	Homo sapiens huntingtin (Huntington disease) (HD) mRNA
8765	21304	34225	0.52	1.0E-48	4758685	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
8765	21304	34226	0.52	1.0E-48	4758685	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
9140	21675	34616	0.84	1.0E-48	4502838	NT	Homo sapiens Cheek-Higashi syndrome 1 (CHS1) mRNA
9182	21709	34653	6	1.0E-48	AB033071.1	NT	Homo sapiens mRNA for KIAA1245 protein, partial cds
9485	21842	34889	0.73	1.0E-48	BE168410.1	EST_HUMAN	QV3-HT0513-060400-147-401 HT0513 Homo sapiens cDNA
9502	22002	34959	3.86	1.0E-48	BF304683.1	EST_HUMAN	601888086F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122119 5'
10272	22767	35754	3.54	1.0E-48	11429808	NT	Homo sapiens B cell linker protein (SLP65), mRNA
10272	22767	35755	3.54	1.0E-48	11429808	NT	Homo sapiens B cell linker protein (SLP65), mRNA
11789	24937		1.62	1.0E-48	W26785.1	EST_HUMAN	15d6 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2052	14633	27204	0.96	8.0E-49	AB028497.1	NT	Mus musculus MyoPDZ mRNA for myosin containing PDZ domain, complete cds
6204	18814	31584	3.44	8.0E-49	10048417	NT	Mus musculus T-box 20 (Tbx20), mRNA
6204	18814	31585	3.44	8.0E-49	10048417	NT	Mus musculus T-box 20 (Tbx20), mRNA
8236	20777	33698	3.22	8.0E-49	U23850.1	NT	Human Inositol 1,4,5 trisphosphate receptor type 1 mRNA, partial cds
8900	22397	35372	1.23	8.0E-49	AB008881.1	NT	Human sapiens gene for activin receptor type IIB, complete cds
10738	23281	38278	1.8	8.0E-49	AI623722.1	EST_HUMAN	hs38d12.x1 NCI_CGAP_U4 Homo sapiens cDNA clone IMAGE:2230871 3' similar to contains Alu repetitive element; contains element PTR5 repetitive element;
145	13052	25542	2.62	7.0E-49	5729890	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMCA) mRNA
145	13052	25543	2.62	7.0E-49	5729890	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMCA) mRNA
417	13052	25542	2.38	7.0E-49	5729890	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMCA) mRNA
417	13052	25543	2.38	7.0E-49	5729890	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMCA) mRNA
418	13052	25542	2.59	7.0E-49	5729890	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMCA) mRNA
418	13052	25543	2.59	7.0E-49	5729890	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMCA) mRNA
1283	13660	26377	3.49	7.0E-49	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5651	18278	30755	1.97	7.0E-49	AB07191.1	EST_HUMAN	wf25h04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356883 3' similar to TR:O64923
5681	18288	30766	1.11	7.0E-49	AL120637.1	EST_HUMAN	OS4923 RSEC15.;
5973	18278	30755	1.14	7.0E-49	AB07191.1	EST_HUMAN	DKFZp762C033_s1 762 (synonym: hmel2) Homo sapiens cDNA clone DKFZp762C033 3'
							wf25h04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356883 3' similar to TR:O64923
							OS4923 RSEC15.;
211	12872	25358	57.13	6.0E-49	AW731740.1	EST_HUMAN	ba53g05.x1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2800504 3' similar to gb:X17206 40S RIBOSOMAL PROTEIN S4 (HUMAN); gb:M20832 Mouse LLRep3 protein mRNA from a repetitive element, complete (MOUSE);
4183	18782	29231	0.59	6.0E-49	AL162091.1	EST_HUMAN	DKFZp761A138_s1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761A138 3'
6571	19169	31866	0.69	6.0E-49	AU140742.1	EST_HUMAN	AU140742 PLACE4 Homo sapiens cDNA clone PLACE4000148 5'
11159	23666	36711	3.66	6.0E-49	AW452218.1	EST_HUMAN	U1H-B18-eb-e-05-0-U1.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:3068048 3'
11514	23682	37031	3.9	6.0E-49	AA368558.1	EST_HUMAN	EST177525 Pancreas tumor III Homo sapiens cDNA 5' end
11514	23682	37032	3.9	6.0E-49	AA368558.1	EST_HUMAN	EST177525 Pancreas tumor III Homo sapiens cDNA 5' end
12166	24823		7.5	6.0E-49	AA707567.1	EST_HUMAN	z28c08.s1 Soares_fetal_liver_spleen_1NLS_S1 Homo sapiens cDNA clone IMAGE:451684 3'
741	13361	25854	6.61	5.0E-49	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
741	13361	25855	6.61	5.0E-49	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
							z28c07.r1 Stratiogene neuroepithelium (H837231) Homo sapiens cDNA clone IMAGE:610800 5' similar to TR:G233228 RTVL-H1 PROTEIN, contains LTR7.53 LTR7 LTR7 repetitive element;
1830	14419	26868	3.16	5.0E-49	AA172121.1	EST_HUMAN	Homo sapiens putative tumor suppressor ST13 (ST13) mRNA, complete cds
2778	15331	27900	4.95	5.0E-49	U17714.1	NT	

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3311	15022	28308	6.09	5.0E-49	11438355	NT	Homo sapiens similar to ribosomal protein S27 (metalloproteinase 1) (H. sapiens) (LOC333362), mRNA
551	13182	25659	28.49	4.0E-49	AW189533.1	EST_HUMAN	x08001.x1 NCI_CGAP_UH Homo sapiens cDNA clone IMAGE:2875593 3' similar to WP:B0350.2B CE06703;
7316	19843	32704	0.79	4.0E-49	11525737	NT	Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylglucosaminyltransferase 8 (GalNAc-T8) (GALNT8), mRNA
7316	19843	32705	0.79	4.0E-49	11525737	NT	Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylglucosaminyltransferase 8 (GalNAc-T8) (GALNT8), mRNA
8798	21337	34283	0.46	4.0E-49	11425374	NT	Homo sapiens copine III (CPNE3), mRNA
8798	21337	34284	0.46	4.0E-49	11425374	NT	Homo sapiens copine III (CPNE3), mRNA
12021	25055		4.9	4.0E-49	AA210798.1	EST_HUMAN	x08005.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:682977 5'
12110	24371		3.14	4.0E-49	AF240798.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
586	13216	25693	1.08	3.0E-49	X69898.1	NT	H. sapiens mRNA for acetyl-CoA carboxylase
2674	15232		1.43	3.0E-49	AA016131.1	EST_HUMAN	ze31c05.r1 Scores retina N2b-4HR Homo sapiens cDNA clone IMAGE:380584 5' similar to contains L1.13 L1 repetitive element;
5120	17692	30130	2.33	3.0E-49	U46999.1	NT	Human type IV collagen (COL4A6) gene, exon 40
7448	19972	32639	9.89	3.0E-49	H30479.1	EST_HUMAN	EST25e12 WATM1 Homo sapiens cDNA clone 25e12
11181	23687	36734	1.98	3.0E-49	AA337591.1	EST_HUMAN	EST42572 Endometrial tumor Homo sapiens cDNA 5' end
689	13313		1.57	2.0E-49	BE165980.1	EST_HUMAN	MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
3259	15871	28351	1.3	2.0E-49	N28448.1	EST_HUMAN	y23d08.r1 Scores melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:262571 5'
3627	16230	28708	0.67	2.0E-49	AF028594.1	NT	Homo sapiens RNA binding protein II (RBMII) gene, complete cds
4918	17493	29945	0.67	2.0E-49	AI167357.1	EST_HUMAN	ca88d02.x1 Scores, senescent, fibroblasts, NIH-SF Homo sapiens cDNA clone IMAGE:1682403 3' similar to gb:M31470 RAS-LIKE PROTEIN TC10 (HUMAN); contains Alu repetitive element; contains element MER22 repetitive element;
4932	17507	29954	0.61	2.0E-49	BF511848.1	EST_HUMAN	gb:M31470 RAS-LIKE PROTEIN TC10 (HUMAN); contains Alu repetitive element; contains element MER22 repetitive element;
6834	19424	32240	1.13	2.0E-49	AV717838.1	EST_HUMAN	UI-H-B14-aps-d-02-Q-U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3088538 3'
8043	20595		1.71	2.0E-49	M86033.1	EST_HUMAN	AV717838 DGB Homo sapiens cDNA clone DGBALB01 5'
12121	24929		1.81	2.0E-49	AF163894.1	NT	EST02558 Fetal brain, Stratagene (cat#836208) Homo sapiens cDNA clone HFBICY50
932	13545		9.12	1.0E-49	BF035327.1	EST_HUMAN	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
1800	14192	28723	14.28	1.0E-49	4557887	NT	EST01458531 F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3862088 5'
1837	14425	28978	4.07	1.0E-49	BE255216.1	EST_HUMAN	EST01458531 F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3862088 5'
5562	18193	30640	8.31	1.0E-49	BF131007.1	EST_HUMAN	Homo sapiens keratin 18 (KRT18) mRNA EST0115769 F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3356273 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6228	18837	31610	0.85	1.0E-49	H18291.1	EST_HUMAN	Y48104.1 Scores adult brain N2b5H1855Y Homo sapiens cDNA clone IMAGE:171703 5' similar to SP:CBG1_HUMAN Q08447 GUANINE NUCLEOTIDE-BINDING PROTEIN G(T) GAMMA-1 SUBUNIT ;
6234	18843	31615	0.94	1.0E-49	AW064840.1	EST_HUMAN	EST376713 IMAGE resequencing, MAGH1 Homo sapiens cDNA
7275	18803	32661	3.31	1.0E-49	BE398110.1	EST_HUMAN	601280330F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620863 5'
7275	18803	32662	3.31	1.0E-49	BE398110.1	EST_HUMAN	601280330F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620863 5'
7342	18869	32733	2.3	1.0E-49	N25884.1	EST_HUMAN	yw78g12.s1 Scores placenta_8a9weeks_2N1bHP8a9W Homo sapiens cDNA clone IMAGE:258406 3' similar to gb:265873 KINESIN HEAVY CHAIN (HUMAN);
7342	18869	32734	2.3	1.0E-49	N25884.1	EST_HUMAN	yw78g12.s1 Scores placenta_8a9weeks_2N1bHP8a9W Homo sapiens cDNA clone IMAGE:258406 3' similar to gb:265873 KINESIN HEAVY CHAIN (HUMAN);
8023	20565	33467	1.23	1.0E-49	11321590	NT	Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCLG1), mRNA
8023	20565	33468	1.23	1.0E-49	11321590	NT	Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCLG1), mRNA
8609	21148		0.93	1.0E-49	8994184	NT	Homo sapiens RNA binding motif protein 7 (LOC51120), mRNA
8023	21461	34378	1.28	1.0E-49	BE406340.1	EST_HUMAN	601300392F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635398 5'
10033	22528	35523	1.26	1.0E-49	AL043129.2	EST_HUMAN	DKFZp434D2423_t1_434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434D2423 5'
10827	23445	36466	2.28	1.0E-49	AV751477.1	EST_HUMAN	AV751477 NPD Homo sapiens cDNA clone NPDAWE04 5'
11190	23695	36744	3.48	1.0E-49	11427368	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 1 (BIG1), mRNA
11653	24081		1.39	1.0E-49	BE156943.1	EST_HUMAN	MR0-HT0407-010200-006-R02 HT0407 Homo sapiens cDNA
12015	24314		2.46	1.0E-49	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
6636	25117		0.88	9.0E-50	BE265758.1	EST_HUMAN	601176250F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3631588 5'
181	12843	25327	2.91	8.0E-50	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
748	13368	25662	1.7	8.0E-50	X95097.2	NT	Homo sapiens mRNA for VIP receptor 2
748	13368	25663	1.7	8.0E-50	X95097.2	NT	Homo sapiens mRNA for VIP receptor 2
1070	13876		6.61	8.0E-50	AF000573.1	NT	Homo sapiens homogenisate 1,2-dioxygenase gene, complete cds
1800	14390	26835	2.81	8.0E-50	4501880	NT	Homo sapiens actinin, alpha 1 (ACTN1), mRNA
2522	15088	27658	1	8.0E-50	7706394	NT	Homo sapiens p47 (LOC51874), mRNA
2522	15088	27659	1	8.0E-50	7706394	NT	Homo sapiens p47 (LOC51874), mRNA
2723	15278	27645	0.98	8.0E-50	4626958	NT	Homo sapiens capping protein (actin filament) muscle Z-line, beta (CAPZB), mRNA
4182	18772	29221	0.99	8.0E-50	AL163261.2	NT	Homo sapiens chromosome 21 segment HS21C081
647	13270	25748	0.97	7.0E-50	BE086591.1	EST_HUMAN	QV0-B10703-280400-211-608 B10703 Homo sapiens cDNA
6880	18614	32448	0.94	7.0E-50	BF091922.1	EST_HUMAN	RC8-TN0073-150900-011-A12 TN0073 Homo sapiens cDNA
6880	18614	32449	0.94	7.0E-50	BF091922.1	EST_HUMAN	RC8-TN0073-150900-011-A12 TN0073 Homo sapiens cDNA
7346	18872	32738	1.25	7.0E-50	AA87822.1	EST_HUMAN	nc50e12.s1 NCL_CGAP_C08 Homo sapiens cDNA clone IMAGE:1148208 3' similar to gb:265391 60S RIBOSOMAL PROTEIN L8 (HUMAN);
10636	23188	36179	22.7	7.0E-50	A1872137.1	EST_HUMAN	wm55g11.x1 NCL_CGAP_U12 Homo sapiens cDNA clone IMAGE:2439808 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4435	17021		0.02	6.0E-50	BE794381.1	EST_HUMAN	601589565F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943577 5'
8155	20898						h036h04.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:3038511 3' similar to contains MER29.b3
10684	23224	36237	6.9	6.0E-50	BE044078.1	EST_HUMAN	MER29 repetitive element;
10684	23224	36238	5.53	6.0E-50	AA312079.1	EST_HUMAN	EST182775 Jurkat T-cells VI Homo sapiens cDNA 5' end
1829	14418	28898	5.53	6.0E-50	AA312079.1	EST_HUMAN	EST182775 Jurkat T-cells VI Homo sapiens cDNA 5' end
1829	14418	28897	0.98	5.0E-50	BF333838.1	EST_HUMAN	CM40-BT0792-300500-398-b05 BT0792 Homo sapiens cDNA
			0.98	5.0E-50	BF333838.1	EST_HUMAN	CM40-BT0792-300500-398-b05 BT0792 Homo sapiens cDNA
9022	21559		4.65	5.0E-50	AA557883.1	EST_HUMAN	n45h10.s1 NCI_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043683 similar to contains PTR5.3 PTR5 repetitive element;
11619	24061	37125	1.57	5.0E-50	AA403053.1	EST_HUMAN	z62b01.t1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728889 5' similar to TR:G1335769
950	13562		1.74	4.0E-50	AA601143.1	EST_HUMAN	G1335769 GAG-POL POLYPROTEIN.;
7285	19813	32868	1.04	4.0E-50	BE067536.1	EST_HUMAN	nc54e08.s1 NCI_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1104520 3' similar to gb:X53741_mn1
1982	14565		2.4	3.0E-50	M18048.1	NT	FIBULIN-1, ISOFORM A PRECURSOR (HUMAN);
3338	15948	28424	0.78	3.0E-50	AA746142.1	EST_HUMAN	QV1-BT0681-280300-127412 BT0681 Homo sapiens cDNA
							Human endogenous retrovirus RTVL-H2
3815	16415	28879	0.93	3.0E-50	AW755254.1	EST_HUMAN	db03906.s1 NCI_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1322827 3'
6982	19506	32427	1.45	3.0E-50	11421514	NT	CMYA5 Human cardiac muscle expression library Homo sapiens cDNA clone 4151835 similar to CMYA5 Cardiomyopathy associated gene 5
7840	20152	33036	4.41	3.0E-50	AF233436.2	NT	Cardiomyopathy associated gene 5
7840	20152	33037	4.41	3.0E-50	AF233436.2	NT	Homo sapiens FVE domain-containing dual specificity protein phosphatase FVE-DSP1a mRNA, complete cds
8518	21057	33980	0.73	3.0E-50	6001589	NT	Homo sapiens FVE domain-containing dual specificity protein phosphatase FVE-DSP1a mRNA, complete cds
9732	22230	35207	1.32	3.0E-50	AB048818.1	NT	Homo sapiens ankyrin-like with transmembrane domains 1 (ANKTM1), mRNA
9741	22239	35220	0.98	3.0E-50	11418514	NT	Homo sapiens mRNA for KIAA1598 protein, partial cds
10412	22806	35903	0.67	3.0E-50	AB002297.1	NT	Homo sapiens t-complex 10 (a murine tcp homolog) (TCP10), mRNA
10981	23495	36524	1.78	3.0E-50	11436955	NT	Human mRNA for KIAA289 gene, partial cds
11339	23037	36046	5.98	3.0E-50	AJ245621.1	NT	Human sapiens Grb2-associated binder 2 (KIAA0571), mRNA
810	13427		9.29	2.0E-50	AF055066.1	NT	Homo sapiens CTL2 gene
1118	13721	26233	4.82	2.0E-50	4557752	NT	Homo sapiens MHC class 1 region
1492	14084	28826	3.56	2.0E-50	AF193903.1	NT	Homo sapiens midline 1 (Optiz/BBB syndrome) (MID1) mRNA
3326	15936	28412	0.81	2.0E-50	AF111188.2	NT	Homo sapiens decorin D mRNA, complete cds, alternatively spliced
							Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4347	16934	28375	0.8	2.0E-50	D86424.1	NT	Mus musculus mRNA for high-eulfur keratin protein, partial cds
8258	20789	33718	1.24	2.0E-50	AB038162.1	NT	Homo sapiens TFF gene cluster for trefoil factor, complete cds
8258	20789	33717	1.24	2.0E-50	AB038162.1	NT	Homo sapiens TFF gene cluster for trefoil factor, complete cds
8393	20833	33854	9.32	2.0E-50	X06956.1	NT	Human HALPHA44 gene for alpha-tubulin, exons 1-3
8393	20833	33855	9.32	2.0E-50	X06956.1	NT	Human HALPHA44 gene for alpha-tubulin, exons 1-3
9769	22297	36281	2.89	2.0E-50	9910293	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
9769	22297	35282	2.89	2.0E-50	9910293	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
11512	23860		2.09	2.0E-50	AF023861.1	NT	Macaca mulatta cyclophilin A mRNA, complete cds
487	13120	25606	1.58	1.0E-50	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
2403	14971		6.87	1.0E-50	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
10095	22560	35583	0.77	1.0E-50	D11078.1	NT	Homo sapiens RGH2 gene, retrovirus-like element
6136	18750	31507	0.89	9.0E-51	AW511225.1	EST_HUMAN	h044602.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2812378 3' similar to TR:O65636
6372	18978	31754	0.69	9.0E-51	AA744837.1	EST_HUMAN	O65636 CAMP-REGULATED GUANINE NUCLEOTIDE EXCHANGE FACTOR II ; m57603.s1 NCI_CGAP_G081 Homo sapiens cDNA clone IMAGE:1283381 3'
8606	21145	34060	0.7	9.0E-51	AJ791154.1	EST_HUMAN	ab23g04.x5 Stratagene lung (#837210) Homo sapiens cDNA clone IMAGE:841688 3' similar to SW:PSM_HUMAN Q04609 PROSTATE-SPECIFIC MEMBRANE ANTIGEN ;
9248	21774	34725	1.16	9.0E-51	AA043738.1	EST_HUMAN	2k51c09.r1 Scores_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:488352 5'
9420	21829	34875	0.52	9.0E-51	AJ791154.1	EST_HUMAN	ab23g04.x5 Stratagene lung (#837210) Homo sapiens cDNA clone IMAGE:841688 3' similar to SW:PSM_HUMAN Q04609 PROSTATE-SPECIFIC MEMBRANE ANTIGEN ;
9420	21829	34878	0.52	9.0E-51	AJ791154.1	EST_HUMAN	ab23g04.x5 Stratagene lung (#837210) Homo sapiens cDNA clone IMAGE:841688 3' similar to SW:PSM_HUMAN Q04609 PROSTATE-SPECIFIC MEMBRANE ANTIGEN ;
4532	17116	29561	2.81	8.0E-51	4503832	NT	Homo sapiens glycine amidinotransferase (L-arginine:glycine amidinotransferase) (GATM) mRNA
4532	17116	29562	2.81	8.0E-51	4503832	NT	Homo sapiens glycine amidinotransferase (L-arginine:glycine amidinotransferase) (GATM) mRNA
4687	17249	29702	13.1	8.0E-51	AA610842.1	EST_HUMAN	np88409.s1 NCI_CGAP_Lu1 Homo sapiens cDNA clone IMAGE:1142440 3' similar to gb:X12871_ma1 HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HUMAN);
5319	17881	30300	1.68	8.0E-51	AF082132.1	NT	Homo sapiens PAK2 mRNA, complete cds
7648	20160	33047	2.08	8.0E-51	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/INCO-38), mRNA
9385	21808		0.89	8.0E-51	AJ138580.1	EST_HUMAN	AU138580 PLACE1 Homo sapiens cDNA clone IMAGE:2865584 3' similar to TR:Q8Z340
3051	15867	28145	0.72	7.0E-51	AW274720.1	EST_HUMAN	Q8Z340 ATYPICAL PKC SPECIFIC BINDING PROTEIN. ;
3321	15931	28408	1.51	7.0E-51	AW88219.1	EST_HUMAN	QV4-NT0028-200400-180-405 NT0028 Homo sapiens cDNA
3408	16017	28496	0.78	7.0E-51	AW274720.1	EST_HUMAN	Q8Z340 ATYPICAL PKC SPECIFIC BINDING PROTEIN. ;
4247	16835	28286	2.14	7.0E-51	AL079628.1	EST_HUMAN	DKFZp434B2229_r1 434 (synonym: hba3) Homo sapiens cDNA clone DKFZp434B2228 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4247	16835	29287	2.14	7.0E-51	AL078628.1	EST_HUMAN	DKFZp434B2229_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434B2228 5'
4443	17029	29469	1.69	7.0E-51	AW295603.1	EST_HUMAN	UII-HBW0-ep-b-05-0-UJ1 NC1 CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2729817 3'
11534	23982	37053	1.65	7.0E-51	AF161449.1	NT	Homo sapiens HSPC331 mRNA, partial cds
1575	14168	26689	17.64	6.0E-51	6678763	NT	Homo sapiens putative DNA binding protein (M86), mRNA
2022	14804	27169	5.19	6.0E-51	7657268	NT	Homo sapiens KIAA0928 protein Nsc2 interacting nuclear target (MINT) homolog (KIAA0928), mRNA
3520	16125	28605	17.1	6.0E-51	7657268	NT	Homo sapiens KIAA0928 protein Nsc2 interacting nuclear target (MINT) homolog (KIAA0928), mRNA
4397	16982	29426	1.08	6.0E-51	9910553	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
4397	16982	29427	1.09	6.0E-51	9910553	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
6142	18756	31514	57.08	6.0E-51	X01788.1	NT	Human haptoglobin related (Hpr) gene exon 3
6152	18765	31527	11.76	6.0E-51	AF070083.1	NT	Homo sapiens mitogen-activated protein kinase kinase 1 (MKK4) gene, exon 4
6152	18765	31528	11.76	6.0E-51	AF070083.1	NT	Homo sapiens mitogen-activated protein kinase kinase 1 (MKK4) gene, exon 4
6658	19592	32424	1.05	6.0E-51	4506736	NT	Homo sapiens ribosomal protein S6 kinase, 70kD, polypeptide 1 (RPS6KB1) mRNA
6972	19549	32373	0.71	6.0E-51	11416751	NT	Homo sapiens non-kinase Cdc42 effector protein SPEC2 (LOC56860), mRNA
7044	18064	30454	2.22	6.0E-51	11428665	NT	Homo sapiens cerebral cell adhesion molecule (LOC51148), mRNA
8064	21601	34530	0.68	6.0E-51	11428525	NT	Homo sapiens hypothetical protein FLJ11042 (FLJ11042), mRNA
8084	21601	34531	0.68	6.0E-51	11428525	NT	Homo sapiens hypothetical protein FLJ11042 (FLJ11042), mRNA
9601	22101	35064	1.79	6.0E-51	7681535	NT	Homo sapiens B9 protein (B9), mRNA
9877	22176	35151	1.35	6.0E-51	U50083.1	NT	Human ankyrin (ANK1) gene, exon 2
11136	23644	36684	1.83	6.0E-51	11526289	NT	Homo sapiens interleukin 17 receptor (IL17R), mRNA
11403	23854	36919	1.58	6.0E-51	5453949	NT	Homo sapiens protein phosphatase 2, regulatory subunit B (B56), alpha isoform (PPP2R5A) mRNA
11403	23854	36920	1.58	6.0E-51	5453949	NT	Homo sapiens protein phosphatase 2, regulatory subunit B (B56), alpha isoform (PPP2R5A) mRNA
824	13441	25948	6.74	5.0E-51	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
836	13452	25962	1.38	5.0E-51	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
1028	15431	26153	1.01	5.0E-51	AL133204.1	NT	Novel human gene mapping to chromosome X
1651	14243	26777	0.99	5.0E-51	5031960	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
2629	15191	27759	9.09	5.0E-51	AJ007558.1	NT	Homo sapiens mRNA for nucleoporin 155
4017	16615	29088	1.21	5.0E-51	M30638.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
4017	16615	29089	1.21	5.0E-51	M30638.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
5231	17785	30214	1.68	5.0E-51	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
11069	23581	36621	2.02	5.0E-51	BE501320.1	EST_HUMAN	7441a02.x1 NC1 CGAP_G08 Homo sapiens cDNA clone IMAGE:3221258 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11160	23687	38712	4.75	5.0E-51	5803138	NT	Homo sapiens RNA binding motif protein 3 (RBM3), mRNA
140	12805	25284	15.48	3.0E-51	AI587348.1	EST_HUMAN	tr181c08.x1 NCL CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2224720 3' similar to gb:M26328 KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
1218	13818	26333	34.32	3.0E-51	AI587348.1	EST_HUMAN	tr181c08.x1 NCL CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2224720 3' similar to gb:M26328 KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
4420	17005	29448	2.04	3.0E-51	AL159142.1	NT	Novel human gene mapping to chromosome 22
7579	20086	32072	1.18	3.0E-51	R15914.1	EST_HUMAN	ye47c08.r1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:53233 5' similar to gb:M14123_cde4 RETROVIRUS-RELATED POLYPROTEIN (HUMAN); contains LTR5 repetitive element;
8773	21312		6.15	3.0E-51	M29063.1	NT	Human hnRNP C2 protein mRNA
8898	25124		0.8	3.0E-51	AW583777.1	EST_HUMAN	tr04d08.y1 Human Pancreatic Islets Homo sapiens cDNA 5'
12348	24528		2.15	3.0E-51	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
389	13035	25524	2.03	2.0E-51	4507798	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA
717	13338	25824	0.94	2.0E-51	BE391063.1	EST_HUMAN	801285694F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607463 5'
717	13338	25825	0.94	2.0E-51	BE391063.1	EST_HUMAN	801285694F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607463 5'
1726	14317	26860	5.61	2.0E-51	AA233352.1	EST_HUMAN	tr30a05.r1 Striatum NT2 neuronal precursor 937230 Homo sapiens cDNA clone IMAGE:984880 5' similar to TR:G233228 G233228 RTVL-H PROTEIN; contains LTR7 LTR7 repetitive element;
3765	16395	28860	2.71	2.0E-51	AA92415.1	EST_HUMAN	tr27g03.x1 NCL CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2131732 3'
4592	17175	29821	1.73	2.0E-51	AW137826.1	EST_HUMAN	U1H-B11-adj-4-02-0-UI.81 NCL CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2716851 3'
5630	18259	30730	0.78	2.0E-51	AI732851.1	EST_HUMAN	tr034f09.x5 NCL CGAP_Kd45 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NME1_MOUSE P35436 GLUTAMATE [NMDA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR;
5630	18259	30731	0.78	2.0E-51	AI732851.1	EST_HUMAN	tr034f09.x5 NCL CGAP_Kd45 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NME1_MOUSE P35436 GLUTAMATE [NMDA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR;
8168	18778	31542	3.28	2.0E-51	BE782015.1	EST_HUMAN	801470446F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3873563 5'
7350	19878		0.77	2.0E-51	AF210927.1	NT	Homo sapiens diacylglycerol kinase Iota (DGKI) gene, exon 23
7480	20002	32867	1	2.0E-51	7862348	NT	Homo sapiens cell recognition molecule Caspr2 (KIAA0968), mRNA
8632	21171	34088	2.06	2.0E-51	BE901994.1	EST_HUMAN	801876787F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:39558613 5'
8632	21171	34089	2.06	2.0E-51	BE901994.1	EST_HUMAN	801876787F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:39558613 5'
8684	21502	34424	0.95	2.0E-51	11037084	NT	Homo sapiens disrupted in schizophrenia 1 (DISC1), mRNA
9431	21957	34905	1.48	2.0E-51	AI917078.1	EST_HUMAN	tr74e07.x1 NCL CGAP_GC8 Homo sapiens cDNA clone IMAGE:2236980 3' similar to SW:TRKC_HUMAN Q16288 NT-3 GROWTH FACTOR RECEPTOR PRECURSOR;
9521	22021	34978	5.22	2.0E-51	BE165980.1	EST_HUMAN	MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9537	22037	34997	0.61	2.0E-51	AB007928.1	NT	Homo sapiens mRNA for KIAA0457 protein, partial cds
10329	22823	35819	1.73	2.0E-51	AV682474.1	EST_HUMAN	AV682474 GKB Homo sapiens cDNA clone GKBAGF05 5'
10368	22862	35855	1.03	2.0E-51	AA378559.1	EST_HUMAN	EST191286 Synovial sarcoma Homo sapiens cDNA 5' end
11207	18259	30730	11.47	2.0E-51	A1732851.1	EST_HUMAN	d34409.x5 NCI_CGAP_K145 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NME1_MOUSE P35436 GLUTAMATE [NMDA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR ;
11207	18259	30731	11.47	2.0E-51	A1732851.1	EST_HUMAN	d34409.x5 NCI_CGAP_K145 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NME1_MOUSE P35436 GLUTAMATE [NMDA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR ;
12343	24524	30824	2.6	2.0E-51	11419159	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4), mRNA
119	12780	25272	27.93	1.0E-51	4503528	NT	Homo sapiens eukaryotic translation initiation factor 4A, isoform 1 (EIF4A1) mRNA
1541	14133		28.47	1.0E-51	AV742248.1	EST_HUMAN	AV742248 CB Homo sapiens cDNA clone CBFBCC12 5'
4498	17082	29531	1	1.0E-51	4750071	NT	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 15 (SCYA15) mRNA
4498	17082	29532	1	1.0E-51	4750071	NT	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 15 (SCYA15) mRNA
5588	18219	30669	2.88	1.0E-51	T19862.1	EST_HUMAN	b120581 Testis 1 Homo sapiens cDNA clone b12058
7645	20157	33044	0.95	1.0E-51	A1572532.1	EST_HUMAN	bc39g02.x1 Soares_NIH-MPc_S1 Homo sapiens cDNA clone IMAGE:2089108 3'
7844	20386	33289	7	1.0E-51	BF434358.1	EST_HUMAN	7c88602.x1 NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3844091 3' similar to TR:P87862 P87862 PROTEASE ;
11613	25126		3.01	1.0E-51	AV760590.1	EST_HUMAN	AV760590 MDS Homo sapiens cDNA clone MDSGB02 5'
10568	23104	36118	1.71	9.0E-52	R91638.1	EST_HUMAN	yq10h04.l1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:198567 5' similar to SP:YGAF_ECOLI P37339 HYPOTHETICAL PROTEIN IN GABP 3'REGION ;
10568	23104	36119	1.71	9.0E-52	R91638.1	EST_HUMAN	yq10h04.l1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:198567 5' similar to SP:YGAF_ECOLI P37339 HYPOTHETICAL PROTEIN IN GABP 3'REGION ;
12105	24387		6.53	9.0E-52	AA777621.1	EST_HUMAN	z65a07.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:448500 3' similar to contains THR.L3 THR repetitive element ;
163	12826	25313	8	8.0E-52	AA720574.1	EST_HUMAN	mw21g02.s1 NCI_CGAP_GC80 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR.L3 THR repetitive element ;
1543	14135	26869	1.32	8.0E-52	XB4800.1	NT	H. sapiens mRNA for laminin-6, alpha3b chain
1694	14286	26821	2.12	8.0E-52	11968028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
1694	14286	26822	2.12	8.0E-52	11968028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
4098	14286	26821	6.96	8.0E-52	11968028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4068	14288	26822	6.98	8.0E-52	11988028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
7526	20046	32615	1.8	8.0E-52	11416585	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA
7528	20046	32616	1.8	8.0E-52	11416585	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA
8943	21481	34403	1.39	7.0E-52	W56471.1	EST_HUMAN	zc56a06.t1 Soares_perathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:326578 5' similar to contains Alu repetitive element
1229	13828		0.85	6.0E-52	BE072409.1	EST_HUMAN	QV3-BT0537-271299-049-407 BT0537 Homo sapiens cDNA
1732	14323	26865	2.63	6.0E-52	AF109807.1	NT	Homo sapiens S164 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
5902	18524	31249	2.12	6.0E-52	AL208794.1	EST_HUMAN	gg44f04.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1838047 3'
11088	23598	36835	1.83	6.0E-52	BE048172.1	EST_HUMAN	tz46h04.y1 NCI_CGAP_Bn52 Homo sapiens cDNA clone IMAGE:2291671 5' similar to SW:PG8M_MOUSE Q05793 BASEMENT MEMBRANE-SPECIFIC HEPARAN SULFATE PROTEOGLYCAN CORE PROTEIN PRECURSOR ;
4535	17119	26566	1.77	5.0E-52	Z78898.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC8pA18H7
1702	14295	26830	1.27	4.0E-52	AF257318.1	NT	Homo sapiens SH3-containing protein SH3GLB1 mRNA, complete cds
1823	14412	26957	1.35	4.0E-52	4758943	NT	Homo sapiens nucleoporin 158kD (NUP155) mRNA
4000	16568	29070	0.62	4.0E-52	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
4849	17427	26879	0.77	4.0E-52	AI768814.1	EST_HUMAN	wf89b02.x1 NCI_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2400459 3'
5490	18124	30531	1.2	4.0E-52	4506132	NT	Homo sapiens phosphoribosyl pyrophosphate synthetase-associated protein 2 (PRPSAP2) mRNA
5490	18124	30532	1.2	4.0E-52	4506132	NT	Homo sapiens phosphoribosyl pyrophosphate synthetase-associated protein 2 (PRPSAP2) mRNA
7982	20524	33430	1.63	4.0E-52	BE622032.1	EST_HUMAN	601440687F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3915836 5'
8471	21011	33928	5.51	4.0E-52	11417035	NT	Homo sapiens hydroxysteroid (17-beta) dehydrogenase 4 (HSD17B4), mRNA
11833	24267		5.12	4.0E-52	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12458	24569		13.98	4.0E-52	AB002059.1	NT	Homo sapiens DNA for Human P204, complete cds
12801	24687		1.57	4.0E-52	AB011399.1	NT	Homo sapiens gene for AF-8, complete cds
4166	16757		12.28	3.0E-52	11437042	NT	Homo sapiens hypothetical protein FLJ10675 (FLJ10675), mRNA
588	13218	25694	4.18	2.0E-52	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
588	13218	25695	4.18	2.0E-52	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
1793	14383	26928	2.84	2.0E-52	AB007899.1	NT	Homo sapiens KIAA0439 mRNA, partial cds
2544	15108	27681	1.1	2.0E-52	BE207575.1	EST_HUMAN	bt66b07.y1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3030421 5' similar to gb:X16483 M.musculus mRNA for Zfp-1 zinc finger protein (MOUSE);
2764	15318		6.65	2.0E-52	BF677892.1	EST_HUMAN	602084710F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248891 5'
5113	17685	30121	3.51	2.0E-52	AL137188.3	NT	Novel human gene mapping to chromosome 20, similar to membrane transporters
5881	18503	31229	3.32	2.0E-52	AW848041.1	EST_HUMAN	IL3-CT0214-231289-033-E12 CT0214 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6505	19105	31890	1.86	2.0E-52	11141868	NT	Homo sapiens Interleukin 21 receptor (IL21R), mRNA
6814	19405	32221	0.89	2.0E-52	AB029004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
7022	18556	32381	0.68	2.0E-52	A1782146.1	EST_HUMAN	cs45d12.y5 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1608311 5'
8587	21126		10.89	2.0E-52	AF147880.1	NT	Macaca mulatta beta-tubulin mRNA, complete cds
8668	21405	34329	0.82	2.0E-52	AA778795.1	EST_HUMAN	z445g03.s1 Soares_fetal_liver_spleen_1NFSL_S1 Homo sapiens cDNA clone IMAGE:453272 3'
9400	21823		1.25	2.0E-52	4756789	NT	Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 5 (15kD) (NADH-coenzyme Q reductase) (NDUFS5) mRNA
10024	22519	35514	5.62	2.0E-52	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
10024	22519	35515	5.62	2.0E-52	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
11083	23595	36830	6.08	2.0E-52	A1831462.1	EST_HUMAN	wf49c04.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THR.b2 THR repetitive element;
11083	23595	36831	6.08	2.0E-52	A1831462.1	EST_HUMAN	wf49c04.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THR.b2 THR repetitive element;
11084	23606	36846	3.85	2.0E-52	AV715377.1	EST_HUMAN	AV715377 DCB Homo sapiens cDNA clone DCB41E03 5'
11231	23762		1.87	2.0E-52	W70260.1	EST_HUMAN	z449g12.t1 Soares_fetal_heart_NIH-H19W Homo sapiens cDNA clone IMAGE:344038 5'
11484	23933		3.4	2.0E-62	11417890	NT	Homo sapiens LIM domain kinase 2 (LIMK2), mRNA
11741	25099	30500	14.03	2.0E-52	AW238297.1	EST_HUMAN	xn72607.x1 NCI_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2700038 3' similar to contains Alu repetitive element; contains element LTR2 repetitive element;
12154	24398		3.83	2.0E-52	A1808885.1	EST_HUMAN	wf67d05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2360849 3' similar to TR:Q16858
558	13188	25688	1.59	1.0E-52	AA634445.1	EST_HUMAN	Q16858 CARBOXYLESTERASE;
1414	14007	26535	11.81	1.0E-52	4504026	NT	z175h12.s1 Soares_bests_NHT Homo sapiens cDNA clone IMAGE:743879 3'
2573	15136		1.75	1.0E-52	4502238	NT	Homo sapiens glutamate-ammonia ligase (glutamine synthase) (GLUL) mRNA
3065	15710	28181	1.65	1.0E-52	S61070.1	NT	Homo sapiens arylsulfatase D (ARSD), transcript variant 1, mRNA
5538	18168	30582	4.94	1.0E-52	M29428.1	NT	pd-reverse transcriptase homolog (retroviral element) [human, endogenous retroviral element RTVL-hp1, Genomic, 660 nt]
6527	19127	31921	2.18	1.0E-52	U38884.1	NT	Human P-glycoprotein (MDR1) gene, exon 4
7458	19881	32846	2.21	1.0E-52	X07282.1	NT	Human PMS2 related (hPMSR2) gene, complete cds
8401	20941		1.24	1.0E-62	AL183227.2	NT	Human aldolase C gene for fructose-1,6-bisphosphate aldolase
9116	21652	34583	0.61	1.0E-52	AF078779.1	NT	Homo sapiens chromosome 21 segment HS21C027
10469	22993		1.13	1.0E-52	AF0720370.1	EST_HUMAN	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
10479	22973		0.78	1.0E-62	AL163202.2	NT	dfr09g05.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2483145 5'
10646	23176	36181	10.04	1.0E-52	U48286.1	NT	Homo sapiens chromosome 21 segment HS21C002
10716	23244		2.37	1.0E-52	11426321	NT	Homo sapiens protein tyrosine phosphatase PTPCAAX1 (PTPCAAX1) mRNA, complete cds
							Homo sapiens proteasome (prosome, macropain) subunit, beta type, 2 (PSMB2), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3659	16457	28620	1.13	9.0E-53	4506064	NT	Homo sapiens protein kinase, cAMP-dependent, regulatory, type II, beta (PRKAR2B) mRNA
5188	17751	30182	0.91	9.0E-53	7661713	NT	Homo sapiens predicted osteoblast protein (GS3788), mRNA
11987	24287		3.79	7.0E-53	BF238465.1	EST_HUMAN	601904771F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4132783 5'
12432	24989		5.2	7.0E-53	A421782.1	EST_HUMAN	644807.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2096077 3' similar to contains THR.11
4174	16765	28213	4.45	5.0E-53	4758543	NT	THIR repetitive element;
5364	17924	30338	1	5.0E-53	AL163282.2	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein C (C1AC2) (HNRPC) mRNA
12035	24324		1.58	5.0E-53	AW813563.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C082
53	12733	25200	1.15	4.0E-53	AL163285.2	NT	RC3-ST0197-151099-011-g10 ST0197 Homo sapiens cDNA
53	12733	25201	1.15	4.0E-53	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
4947	17522	28684	0.99	4.0E-53	7705414	NT	Homo sapiens chromosome 21 segment HS21C085
9337	21851		0.68	4.0E-53	A613037.1	EST_HUMAN	Homo sapiens hook1 protein (HOOK1), mRNA
9671	22170		0.71	4.0E-53	F13080.1	EST_HUMAN	Y08H04.x1 NCI_CGAP_U13 Homo sapiens cDNA clone IMAGE:2278327 3'
11091	23803	36842	3.98	4.0E-53	BF128701.1	EST_HUMAN	HS3C1D041 normalized infant brain cDNA Homo sapiens cDNA clone c-3id04
11091	23803	36843	3.98	4.0E-53	BF128701.1	EST_HUMAN	601810969F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4053977 5'
							601810969F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4053977 5'
2884	15242	27810	2.09	3.0E-53	AB028888.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
3794	16394	28859	1.19	3.0E-53	AW050836.1	EST_HUMAN	wz22c07.x1 Scores_Dieckgrafe_colon_NHCD Homo sapiens cDNA clone IMAGE:2568798 3'
4881	17273	29721	0.85	3.0E-53	AW803563.1	EST_HUMAN	IL2-UM0081-240300-055-D03 UM0081 Homo sapiens cDNA
5618	18247	30698	0.99	3.0E-53	AF001212.1	NT	Homo sapiens 28S proteasome subunit 9 mRNA, complete cds
5808	18433	31154	0.91	3.0E-53	11526287	NT	Homo sapiens MIL1 protein (MIL1), mRNA
6341	18947	31724	0.89	3.0E-53	BE160025.1	EST_HUMAN	QV1-HT0412-280300-123-c04 HT0412 Homo sapiens cDNA
7155	19687	32530	0.92	3.0E-53	Y10388.3	NT	H. sapiens grial gene
7155	19687	32531	0.92	3.0E-53	Y10388.3	NT	H. sapiens grial gene
8246	20787	33708	10.03	3.0E-53	ST2043.1	NT	GIF=growth inhibitory factor [human, brain, Genomic, 2015 nt]
8783	21332	34258	0.51	3.0E-53	10836080	NT	Homo sapiens bone morphogenetic protein 5 (BMP5), mRNA
8887	21525		7.06	3.0E-53	5901953	NT	Homo sapiens FGFR1 oncogene partner (FOP), mRNA
11887	24221		1.27	3.0E-53	11428423	NT	Homo sapiens acetyl-Coenzyme A carboxylase alpha (ACACA), mRNA
483	13116		32.96	2.0E-53	AA366556.1	EST_HUMAN	ES177525 Pancreas tumor III Homo sapiens cDNA 5' end
2365	14836	27508	5.15	2.0E-53	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
2574	15137		12.23	2.0E-53	4502316	NT	Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) 31kD; Vacuolar proton-ATPase, subunit E; V-ATPase, subunit E (ATP8E), mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2752	15307	27871	0.9	2.0E-53	4757815	NT	Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 1; cyclin D-related (CBFA2T1) mRNA
2752	15307	27872	0.9	2.0E-53	4757815	NT	Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 1; cyclin D-related (CBFA2T1) mRNA
3255	15867	28347	0.65	2.0E-53	7705897	NT	Homo sapiens leucine aminopeptidase (LOC51056), mRNA
3282	15863	28372	0.67	2.0E-53	AF083822.1	NT	Homo sapiens dihydropyridine receptor alpha 2 subunit (CACNA2D1) gene, exon 6
4133	16725	28178	2.15	2.0E-53	M61673.1	NT	Human Kruppel-related DNA-binding protein (TF34) gene, partial cds
5619	18248	30689	3.27	2.0E-53	BF334740.1	EST_HUMAN	PM1-CT0398-170800-001-g03 CT0398 Homo sapiens cDNA
5619	18248	30700	3.27	2.0E-53	BF334740.1	EST_HUMAN	PM1-CT0398-170800-001-g03 CT0398 Homo sapiens cDNA
7812	20355	33283	0.84	2.0E-53	AW975598.1	EST_HUMAN	EST387707 MAGE resequences, MAGN Homo sapiens cDNA
7949	20491		0.83	2.0E-53	AA095632.1	EST_HUMAN	15428.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'
9329	21843		17.91	2.0E-53	AW245678.1	EST_HUMAN	2822665.Sprtime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822665 5'
1495	14087	26827	1.88	1.0E-53	AJ271738.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
3458	16063	28538	1.4	1.0E-53	AB028898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
4220	16808	28256	0.67	1.0E-53	AV714177.1	EST_HUMAN	AV714177 DCB Homo sapiens cDNA clone DCBAWFO8 5'
5089	17671	30110	1.08	1.0E-53	BE288398.1	EST_HUMAN	601178725F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531919 5'
6704	19385	32201	1.34	1.0E-53	BF384201.1	EST_HUMAN	GM4-NN1028-150800-543-e02 NN1028 Homo sapiens cDNA
7295	19823	32882	0.93	1.0E-53	BE012071.1	EST_HUMAN	RCS-BN1058-270400-031-D01 BN1058 Homo sapiens cDNA
7878	20418	33328	0.5	1.0E-53	AA249072.1	EST_HUMAN	196371.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'
9018	21555	34483	15.04	1.0E-53	X79536.1	NT	H. sapiens mRNA for TrfNIPcore protein A1
3280	15901	28381	0.57	9.0E-54	4504118	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
5505	24743	30549	5.34	9.0E-54	4506788	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1) mRNA
221	12882	25367	3.54	8.0E-54	BE388785.1	EST_HUMAN	601272863F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3814031 5'
1875	14461	27018	1.82	8.0E-54	4504610	NT	Homo sapiens insulin-like growth factor 2 receptor (IGF2R) mRNA
4841	17419	29871	0.6	8.0E-54	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
4841	17419	29872	0.6	8.0E-54	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
6082	18708	31466	20.41	8.0E-54	6005700	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 8 (ABC8), mRNA
407	13082	25574	1.55	7.0E-54	AA812537.1	EST_HUMAN	af78c12.61 Soares_testis_NHT Homo sapiens cDNA clone 1377046 3' similar to contains MER30.13 MER30 repetitive element ;
1870	14456	27013	2.37	7.0E-54	Y18845.1	NT	Homo sapiens mRNA for monocyte chemotactic protein-2
2248	14820	27395	5.06	7.0E-54	N27177.1	EST_HUMAN	yw68d12.61 Soares_placenta_8d0weeks_2NblHP8c0W Homo sapiens cDNA clone IMAGE:257388 3' similar to contains LTR7.b3 LTR7 repetitive element ;
4894	17276		23.4	7.0E-54	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10034	22529	35524	2.32	7.0E-54	11417222	NT	Homo sapiens similar to nuclear factor related to kappa B binding protein (H. sapiens) (LOC83182), mRNA
11171	23978		7.41	7.0E-54	AI160188.1	EST_HUMAN	qb87g03.x1 Soares_fetal_heart_NbIH19W Homo sapiens cDNA clone IMAGE:1705204 3' similar to
26	12705	25163	2.31	6.0E-54	AB0039818.1	NT	contains ORF,11 ORF repetitive element:
408	13083	25575	1.14	6.0E-54	8922148	NT	Homo sapiens DNA for MICB, exon 4, 5 and partial cds
408	13083	25578	1.14	6.0E-54	8922148	NT	Homo sapiens hypothetical protein DKFZp434M035 (DKFZp434M035), mRNA
1917	14502	27058	1.44	6.0E-54	4505052	NT	Homo sapiens hypothetical protein DKFZp434M035 (DKFZp434M035), mRNA
1917	14502	27059	1.44	6.0E-54	4505052	NT	Homo sapiens lymphocyte antigen 75 (LY75) mRNA, and translated products
3322	15932	28409	1.08	6.0E-54	8922148	NT	Homo sapiens lymphocyte antigen 75 (LY75) mRNA, and translated products
4078	16672	29133	35.08	6.0E-54	4502872	NT	Homo sapiens hypothetical protein DKFZp434M035 (DKFZp434M035), mRNA
4561	17144	29591	0.88	6.0E-54	AV754746.1	EST_HUMAN	Homo sapiens chloride channel 8 (CLCN8) mRNA
4989	17543	29885	1.07	6.0E-54	4505906	NT	AV754746 TP Homo sapiens cDNA clone TPGAAC10 5'
5001	17574		1.81	6.0E-54	Y08846.1	NT	Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA) mRNA
5140	17574		2.28	6.0E-54	Y08846.1	NT	H. sapiens shc pseudogene, p68 isoform
11329	23027	36036	3.33	6.0E-54	AW813587.1	EST_HUMAN	H. sapiens shc pseudogene, p68 isoform
2185	14771	27345	2.41	5.0E-54	P51523	SWISSPROT	RCS-ST0197-151099-011-f08 ST0197 Homo sapiens cDNA
195	12855		111.77	4.0E-54	AF110103.1	NT	ZINC FINGER PROTEIN 84 (ZINC FINGER PROTEIN HPF2)
							Tupala belongs beta-actin mRNA, partial cds
							EST177698 Jurkat T-cells VI Homo sapiens cDNA 5' end similar to glyceraldehyde-3-phosphate
							dehydrogenase
881	13603	26117	69.58	4.0E-54	AA306764.1	EST_HUMAN	Human mRNA for KIAA0077 gene, partial cds
1841	14428	26981	2.97	4.0E-54	D38521.1	NT	Human mRNA for KIAA0077 gene, partial cds
1841	14428	26982	2.97	4.0E-54	D38521.1	NT	Human mRNA for KIAA0077 gene, partial cds
							wd28d11.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2326288 3' similar to TR:002711
3238	15850		1.45	4.0E-54	AI835096.1	EST_HUMAN	002711 PRO-POL-DUTPASE POLYPROTEIN:
87	12773	25265	9.67	3.0E-54	AA313487.1	EST_HUMAN	EST185371 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end
2804	15168	27753	0.97	3.0E-54	AL110383.1	EST_HUMAN	DKFZp434E0731_r1 434 (synonym: hncs3) Homo sapiens cDNA clone DKFZp434E0731 5'
6063	18680	31422	1.44	3.0E-54	4502434	NT	Homo sapiens BMX non-receptor tyrosine kinase (BMX) mRNA
7422	18946	32811	1.54	3.0E-54	AA844061.1	EST_HUMAN	ai92c08.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1388270 3'
7422	18946	32812	1.54	3.0E-54	AA844061.1	EST_HUMAN	ai92c08.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1388270 3'
10984	23479	36504	4.52	3.0E-54	BF345600.1	EST_HUMAN	602019408F1 NCI_CGAP_Bm87 Homo sapiens cDNA clone IMAGE:4155121 5'
							z70f12.l1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727727 5' similar to TR:G181315
11247	23777	36834	4.44	3.0E-54	AA393362.1	EST_HUMAN	G191315 ANDROGEN-DEPENDENT EXPRESSED PROTEIN.;
11844	24206	31040	2.75	3.0E-54	AW954559.1	EST_HUMAN	EST366629 MAGC resequences, MAGC Homo sapiens cDNA
11885	25059		4.05	3.0E-54	AW748965.1	EST_HUMAN	RC1-BT0313-131199-011-509 BT0313 Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
670	13294	25774	28.57	2.0E-54	5031900	NT	Homo sapiens killer cell lectin-like receptor subfamily G, member 1 (KLRG1), mRNA
1409	14002	26530	1.59	2.0E-54	4507194	NT	Homo sapiens nuclear antigen Sp100 (SP100) mRNA
1595	14188	26719	1.03	2.0E-54	AA855008.1	EST_HUMAN	nt78a09.at NCI_CGAP_P3 Homo sapiens cDNA clone IMAGE:1204600 similar to contains element L1 repetitive element ;
2577	15139	27709	0.88	2.0E-54	AW163175.1	EST_HUMAN	au82g03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783784 5' similar to SW:CU1.1_HUMAN Q13816 CULLIN HOMOLOG 1 ;
2835	15195	27768	1.29	2.0E-54	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
2820	15537	28012	1.28	2.0E-54	AW057524.1	EST_HUMAN	wy00b12.x1 Soares NSF_FB_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2562827 3' similar to TR:Q82084 Q82084 PHOSPHOLIPASE C NEIGHBORING ;
3602	16206		5.09	2.0E-54	AA532925.1	EST_HUMAN	nt45g09.at NCI_CGAP_P3 Homo sapiens cDNA clone IMAGE:885488 similar to gbX53777 60S RIBOSOMAL PROTEIN L23 (HUMAN);
3915	16513	28975	0.62	2.0E-54	4506378	NT	Homo sapiens mitogen-activated protein kinase kinase kinase 3 (MAP4K3), mRNA
3915	16513	28976	0.62	2.0E-54	4506378	NT	Homo sapiens mitogen-activated protein kinase kinase kinase 3 (MAP4K3), mRNA
4283	16869		2.42	2.0E-54	4502842	NT	Homo sapiens chaperonin containing T-complex subunit 6 (CCT6) mRNA
4538	17120		1.11	2.0E-54	AF208161.1	NT	Homo sapiens synovial precursor, mRNA, complete cds
4541	17126		3.09	2.0E-54	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
5688	18283	30773	2.15	2.0E-54	4760069	NT	Homo sapiens small inducible cytokine subfamily A (Cyt-Cyt), member 14 (SCYA14) mRNA
5788	18413	31130	0.98	2.0E-54	BED47884.1	EST_HUMAN	tx43c11.y1 NCI_CGAP_Bmi52 Homo sapiens cDNA clone IMAGE:2281348 5'
5935	18556	31284	3.98	2.0E-54	11426857	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
6022	18641	31381	11.05	2.0E-54	AB046811.1	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
6022	18641	31382	11.05	2.0E-54	AB046811.1	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
6763	19356	32165	0.88	2.0E-54	AF008915.1	NT	Homo sapiens EVI5 homolog mRNA, complete cds
7177	19709	32557	8.13	2.0E-54	11428544	NT	Homo sapiens neurofibrin 1 (neurofibrin, von Recklinghausen disease, Watson disease) (NF1), mRNA
8547	22047	35008	3.27	2.0E-54	AB001025.1	NT	Homo sapiens mRNA for brain ryanodine receptor, complete cds
9822	22418	35392	1.45	2.0E-54	11429127	NT	Homo sapiens Janus kinase 2 (a protein tyrosine kinase) (JAK2), mRNA
10028	22523	35519	0.88	2.0E-54	11416782	NT	Homo sapiens serologically defined colon cancer antigen 10 (SDCCAG10), mRNA
10028	22523	35520	0.88	2.0E-54	11416782	NT	Homo sapiens serologically defined colon cancer antigen 10 (SDCCAG10), mRNA
11573	24020		3.33	2.0E-54	7657454	NT	Homo sapiens p53 (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
12368	24539	30903	2.87	2.0E-54	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
4594	17147		1.23	1.0E-54	BF315418.1	EST_HUMAN	601869230.F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4128535 5'
8884	21203	34121	0.64	1.0E-54	11417222	NT	Homo sapiens similar to nuclear factor related to kappa B binding protein (H. sapiens) (LOC83182), mRNA
10152	22847	35640	0.56	1.0E-54	AA412409.1	EST_HUMAN	zu10a09.t1 Soares_hstis_NHT Homo sapiens cDNA clone IMAGE:731464 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10152	22647	35641	0.55	1.0E-54	AA412409.1	EST_HUMAN	zu10609.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:731464 5'
12647	24852		3.58	1.0E-54	AU077341.1	EST_HUMAN	AU077341 Sugano cDNA library Homo sapiens cDNA clone Zv6C880 similar to 5'-end region of Human gamma-glutamyl transpeptidase mRNA, 5 end
10262	22757	35744	0.81	8.0E-55	BE081469.1	EST_HUMAN	QY2-BT0636-160400-143-h12 BT0636 Homo sapiens cDNA
1359	13953		0.81	8.0E-55	Y07829.2	NT	Homo sapiens RFB30 gene for RING finger protein
1362	13958		2.21	8.0E-55	Y07829.2	NT	Homo sapiens RFB30 gene for RING finger protein
11075	23587		2.49	8.0E-55	AW408714.1	EST_HUMAN	fr02a02.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2960907 5'
							Yf28a04.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:127988 5' similar to SP:CS61_BOVIN P10897 CYTOCHROME;
1120	13723	26236	1.55	7.0E-55	RD9346.1	EST_HUMAN	xd76c02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2603522 3' similar to TR:O60365
8739	21278		1.75	7.0E-55	AW103839.1	EST_HUMAN	O60365 FOS39554_1.1;
9109	21645	34585	1.34	7.0E-55	AA889581.1	EST_HUMAN	ek28a11.11 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1407260 3'
9142	21677	34620	1.88	7.0E-55	AU139809.1	EST_HUMAN	AU139809 PLACE1 Homo sapiens cDNA clone PLACE1011576 5'
11087	23599	36636	14.07	7.0E-55	AL010361.1	EST_HUMAN	tz29f09.x1 NCI_CGAP_U1 Homo sapiens cDNA clone IMAGE:2210249 3'
			14.07	7.0E-55	AL010361.1	EST_HUMAN	tz29f09.x1 NCI_CGAP_U1 Homo sapiens cDNA clone IMAGE:2210249 3'
12516	24885	36837	9.8	7.0E-55	H23398.1	EST_HUMAN	ym57g07.r1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:52444 5'
11389	23441	36806	2.37	6.0E-55	AB040634.1	NT	Homo sapiens mRNA for KIAA1501 protein, partial cds
1808	14396	26940	1.13	5.0E-55	AA704971.1	EST_HUMAN	z65b08.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:462617 3'
1808	14398	26941	1.13	5.0E-55	AA704971.1	EST_HUMAN	z65b08.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:462617 3'
6661	18257	32060	1.88	5.0E-55		NT	Homo sapiens arylsulfatase E (chondrodysplasia punctata 1) (ARSE), mRNA
6661	18257	32061	1.88	5.0E-55	4502240	NT	Homo sapiens arylsulfatase E (chondrodysplasia punctata 1) (ARSE), mRNA
6772	24769	32174	2.24	5.0E-55	4505952	NT	Homo sapiens arylsulfatase E (chondrodysplasia punctata 1) (ARSE), mRNA
6772	24769	32175	2.24	5.0E-55	4505952	NT	Homo sapiens arylsulfatase E (chondrodysplasia punctata 1) (ARSE), mRNA
7337	18884	32728	0.78	5.0E-55	11434422	NT	Homo sapiens paroxonase 2 (PON2) mRNA, and translated products
7836	20478	33388	0.85	5.0E-55	11528491	NT	Homo sapiens speckle-type POZ protein (SPOP), mRNA
8974	21512	34435	2.35	5.0E-55	4506302	NT	Homo sapiens BCL2-associated athanogene (BAG1), mRNA
9243	21769		1.89	5.0E-55	BE064388.1	EST_HUMAN	Homo sapiens protein tyrosine phosphatase, receptor type, alpha polypeptide (PTPRA) mRNA
9850	22445	35425	1.55	5.0E-55	AB014511.1	NT	RC4-BT0310-110300-015-F10 BT0310 Homo sapiens cDNA
9850	22445	35428	1.55	5.0E-55	AB014511.1	NT	Homo sapiens mRNA for KIAA0811 protein, partial cds
10122	22817	35608	0.93	5.0E-55	AB014511.1	NT	Homo sapiens mRNA for KIAA0811 protein, partial cds
11825	24260		2.15	5.0E-55	5453765	NT	Homo sapiens nrl (chicken)-like 2 (NELL2), mRNA
59	15406	25209	1.97	4.0E-55	11417972	NT	Homo sapiens pscadillo (zebrafish) homolog 1, containing BRCT domain (PES1), mRNA
700	13322	25809	41.63	4.0E-55	AW657894.1	EST_HUMAN	EST1370064 IMAGE resequences, IMAGE Homo sapiens cDNA
1489	14082	26621	1.12	4.0E-55	4826973	NT	Homo sapiens RNA binding motif protein, Y chromosome, family 1, member A1 (RBM1A1) mRNA
					7661713	NT	Homo sapiens predicted osteoblast protein (OS3780), mRNA

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1489	14082	26822	1.12	4.0E-55	7681713	NT	Homo sapiens predicted osteoblast protein (GS3786), mRNA
1561	14163		1.02	4.0E-55	BF081411.1	EST_HUMAN	752b10.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3360043 3' similar to contains L1.13 L1 repetitive element;
2071	14651	27222	1.47	4.0E-55	4506180	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 2 (PSMA2) mRNA
2071	14651	27223	1.47	4.0E-55	4506180	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 2 (PSMA2) mRNA
2132	14710	27281	8.27	4.0E-55	4503314	NT	Homo sapiens diacylglycerol kinase, gamma (80KD) (DGKG) mRNA
2132	14710	27282	8.27	4.0E-55	4503314	NT	Homo sapiens diacylglycerol kinase, gamma (80KD) (DGKG) mRNA
2349	14820	27485	1.64	4.0E-55	4507704	NT	Homo sapiens ubiquitin-conjugating enzyme E2 variant 1 (UBE2V1) mRNA
3318	15828	28405	1.01	4.0E-55	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
8285	20826		7.91	4.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
11108	23618		4.93	4.0E-55	W28188.1	EST_HUMAN	43c5 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
11845	24207		1.88	4.0E-55	BF303941.1	EST_HUMAN	60188657F2 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4120338 5'
6710	18304	32108	0.83	3.0E-55	AA077156.1	EST_HUMAN	7809A09 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7809A09
10224	22719	35709	0.48	3.0E-55	AF005273.1	NT	Sus scrofa domestica submandibular apomucin mRNA, complete cds
11780	24167		6.76	3.0E-55	BE178519.1	EST_HUMAN	PM1-HT0603-090300-001-g08 HT0603 Homo sapiens cDNA
12563	24683		1.93	3.0E-55	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
400	13044	25535	2.16	2.0E-55	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
577	13207		2.15	2.0E-55	M10876.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
677	13301	25783	3.11	2.0E-55	4507206	NT	Homo sapiens syntaxin-binding protein 1 (STXB1) mRNA, and translated products
2688	15802	28082	0.83	2.0E-55		NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA
4888	17463	28617	2.37	2.0E-55	BE718686.1	EST_HUMAN	CM1-HT0876-150800-357-g03 HT0876 Homo sapiens cDNA
7515	24785	32802	0.67	2.0E-55	AW501988.1	EST_HUMAN	UI-HF-BN0-aks-f-08-0-JL1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078275 5'
8095	21533	34462	0.46	2.0E-55	BF224452.1	EST_HUMAN	hr78h08.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134463 3'
8095	21533	34463	0.46	2.0E-55	BF224452.1	EST_HUMAN	hr78h08.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134463 3'
9087	21623		3.77	2.0E-55	AN002838.1	EST_HUMAN	am88105.s1 Stratiotes ecizto brain S11 Homo sapiens cDNA clone IMAGE:1684185 3' similar to contains THR.b2 THR repetitive element;
9165	21700		0.7	2.0E-55	BE007859.1	EST_HUMAN	QY0-BN0147-280400-213-g08 BN0147 Homo sapiens cDNA
10144	22639	35628	0.47	2.0E-55	AA39401.1	EST_HUMAN	903h08.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2140479 3'
10828	23349	36365	2.22	2.0E-55	AU118344.1	EST_HUMAN	AU118344 HEMBA1 Homo sapiens cDNA clone HEMBA1005583 5'
100	12776	25258	1.25	1.0E-55	4505080	NT	Homo sapiens mannose-6-phosphate receptor (cation dependent) (M6PR) mRNA
203	12864	25348	-84.41	1.0E-55	U09823.1	NT	Oryctolagus cuniculus New Zealand white elongation factor 1 alpha (Rabefia2) mRNA, complete cds
600	13229	25702	0.86	1.0E-55	A026718.1	EST_HUMAN	ov85g09.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1644160 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1189	13760	26301	8.18	1.0E-55	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
1893	14575	27134	1.21	1.0E-55	BE277861.1	EST_HUMAN	6011201106F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2987027 5'
1893	14575	27135	1.21	1.0E-55	BE277861.1	EST_HUMAN	6011201106F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2987027 5'
2363	14834		2.58	1.0E-55	5803174	NT	Homo sapiens SMA3 (SMA3), mRNA
2376	15399	27519	1.04	1.0E-55	AF000990.1	NT	Homo sapiens testis-specific Testis Transcript Y 1 (TTY1) mRNA, partial cds
2558	15122	27691	10.31	1.0E-55	X13111.1	NT	Human mRNA for HLA-A11E, a MHC class I molecule (major histocompatibility complex)
2690	15152	27718	4.82	1.0E-55	AB007868.2	NT	Homo sapiens mRNA for KIAA0408 protein, partial cds
2690	15152	27719	4.82	1.0E-55	AB007868.2	NT	Homo sapiens mRNA for KIAA0408 protein, partial cds
2642	15201	27774	1.88	1.0E-55	L54057.1	NT	Homo sapiens mRNA for KIAA0408 protein, partial cds
4061	16858	29120	4.09	1.0E-55	AL163287.2	NT	Homo sapiens CLP mRNA, partial cds
4382	16989	29417	1.24	1.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C067
4837	17415		1.17	1.0E-55	N77281.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
4954	17528	28870	1.61	1.0E-55	AB037163.1	NT	Y44g03.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:245820 5'
4864	17629	28871	1.61	1.0E-55	AB037163.1	NT	Homo sapiens DSCR5b mRNA, complete cds
5311	17873	30295	1.03	1.0E-55	8823125	NT	Homo sapiens DSCR5b mRNA, complete cds
5889	18315	30814	8.13	1.0E-55	AF118856.1	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
6417	19020	31804	7.22	1.0E-55	11433048	NT	Homo sapiens PRO1851 mRNA, complete cds
6417	19020	31805	7.22	1.0E-55	11433048	NT	Homo sapiens lect domain and RLD 2 (HERC2), mRNA
7830	20472	33381	2.11	1.0E-55	11432894	NT	Homo sapiens lect domain and RLD 2 (HERC2), mRNA
7830	20472	33382	2.11	1.0E-55	11432894	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2), mRNA
8026	20568	33471	0.97	1.0E-55	AF224492.1	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2), mRNA
8026	20568	33472	0.97	1.0E-55	AF224492.1	NT	Homo sapiens phospholipid scramblase 1 gene, complete cds
10791	23314	36322	4.95	1.0E-55	AL163210.2	NT	Homo sapiens phospholipid scramblase 1 gene, complete cds
10791	23314	36323	4.95	1.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
11322	23020	36029	2.23	1.0E-55	U50950.1	NT	Homo sapiens chromosome 21 segment HS21C010
						NT	Human infant brain unknown product mRNA, complete cds
11342	23040	36049	1.68	1.0E-55	T10045.1	EST_HUMAN	seq1575 b4HB3MA Co6-HAP-F1 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-F181 5' similar to similar
11448	23898	36964	1.81	1.0E-55	10567821	NT	to Chinese Hamster Ovarian cell-derived protein mRNA
7401	19826	32791	1.97	9.0E-56	BE375074.1	EST_HUMAN	Homo sapiens DNA-binding protein (LOC58242), mRNA
						EST_HUMAN	601237702F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609552 5'
2761	15316	27682	3.95	7.0E-56	H19894.1	EST_HUMAN	Yn62g03.r1 Soares adult brain N2B5HB55Y Homo sapiens cDNA clone IMAGE:173044 5' similar to contains
7638	20148	33031	2.11	7.0E-56	AW361213.1	EST_HUMAN	THIR repetitive element;
7636	20148	33032	2.11	7.0E-56	AW361213.1	EST_HUMAN	RC1-CT0252-231089-013-b07 CT0252 Homo sapiens cDNA
1730	14321	26863	1.59	5.0E-56	AW697712.1	EST_HUMAN	RC1-CT0252-231089-013-b07 CT0252 Homo sapiens cDNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9088	21824	34559	0.8	5.0E-56	AW015507.1	EST_HUMAN	UHH-B10p-sau-a-05-0-U1.s1 NCI_CGAP_Sub2 Homo sapiens cDNA clone IMAGE:2710544 3'
10289	22784		1.35	5.0E-56	W28189.1	EST_HUMAN	43c5 Human retina cDNA randomly primed sublibrary/Homo sapiens cDNA
12020	25048	30509	3.74	5.0E-56	H55099.1	EST_HUMAN	CHR220338 Chromosome 22 exon Homo sapiens cDNA clone C22_55 5'
30	12709	25168	22.23	4.0E-56	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
30	12709	25167	22.23	4.0E-56	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
2733	15288	27855	7.6	4.0E-56	4507728	NT	Homo sapiens tubulin, beta polypeptide (TUBB) mRNA
2733	15288	27856	7.6	4.0E-56	4507728	NT	Homo sapiens tubulin, beta polypeptide (TUBB) mRNA
2838	13183	25981	3.4	4.0E-56	AF003528.1	NT	Homo sapiens X-linked arylidic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
8405	19008	31789	5.85	4.0E-56	AF217508.1	NT	Homo sapiens uncharacterized bone marrow protein BMD31 mRNA, complete cds
8405	19008	31790	5.85	4.0E-56	AF217508.1	NT	Homo sapiens uncharacterized bone marrow protein BMD31 mRNA, complete cds
10400	22894	35889	1.2	4.0E-56	AF043349.1	NT	Homo sapiens lymphocyte-specific protein 1 (LSP1) gene, LSP1-7 allele, partial cds
10803	23326	36335	8.31	4.0E-56	AI498068.1	EST_HUMAN	hm85g12x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2163048 3'
10803	23326	36336	8.31	4.0E-56	AI498068.1	EST_HUMAN	hm85g12x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2163048 3'
1398	13980	28507	2.12	3.0E-56	8824029	NT	Homo sapiens hypothetical protein PRO1304 (PRO1304), mRNA
1801	14391	28838	4.33	3.0E-56	6912743	NT	Homo sapiens 5'-3' exonuclease 2 (XRN2), mRNA
3159	15773	28240	1.88	3.0E-56	AA325826.1	EST_HUMAN	EST28889 Carabellum II Homo sapiens cDNA 5' end
3159	15773	28241	1.88	3.0E-56	AA325826.1	EST_HUMAN	EST28889 Carabellum II Homo sapiens cDNA 5' end
3903	16502		2.38	3.0E-56	AF055068.1	NT	Homo sapiens MHC class 1 region
3991	16589	29081	0.9	3.0E-56	BE393512.1	EST_HUMAN	601310203F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3631948 5'
4477	17082	29512	0.82	3.0E-56	7657042	NT	Homo sapiens Down syndrome candidate region 1 (DSCR1), mRNA
4515	17099	28546	5.15	3.0E-56	AL183268.2	NT	Homo sapiens chromosome 21 segment HS21C068
4673	17255	29707	2.57	3.0E-56	5902085	NT	Homo sapiens superkiller viral-like activity 2 (S. cerevisiae homolog)-like (SKV2L), mRNA
4925	17500		1.14	3.0E-56	BE863572.1	EST_HUMAN	601438154F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3923100 5'
5280	17842	30269	0.6	3.0E-56	6912593	NT	Homo sapiens phosphotyrosine transfer protein, beta (PTPNB), mRNA
5348	17842	30269	0.59	3.0E-56	6912593	NT	Homo sapiens phosphotyrosine transfer protein, beta (PTPNB), mRNA
5893	18485	31208	1.4	3.0E-56	4759163	NT	Homo sapiens speractin, cwcw and kazal-like domains proteoglycan (testican) (SPOCK) mRNA
5893	18485	31209	1.4	3.0E-56	4759163	NT	Homo sapiens speractin, cwcw and kazal-like domains proteoglycan (testican) (SPOCK) mRNA
6956	19533	32358	6.22	3.0E-56	11421124	NT	Homo sapiens lysosomal-associated membrane protein 2 (LAMP2), mRNA
8750	21289	34209	5.2	3.0E-56	11418704	NT	Homo sapiens bone morphogenetic protein 5 (BMP5), mRNA
9727	22225	35202	0.86	3.0E-56	D63479.2	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
10375	22669	35862	1.63	3.0E-56	11434958	NT	Homo sapiens KIAA0317 gene product (KIAA0317), mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11104	23689	36749	6.31	3.0E-56	5902013	NT	Homo sapiens nuclear pore complex interacting protein (NPIP), mRNA
11194	23689	36750	6.31	3.0E-56	5902013	NT	Homo sapiens nuclear pore complex interacting protein (NPIP), mRNA
11883	24230	31002	1.3	3.0E-56	11434876	NT	Homo sapiens caveolin 3 (CAV3), mRNA
11883	24230	31003	1.3	3.0E-56	11434876	NT	Homo sapiens caveolin 3 (CAV3), mRNA
550	13181		2.35	2.0E-56	AA198818.1	EST_HUMAN	zfp52a08.s1 Stratiotes neuroepithelium (4637231) Homo sapiens cDNA clone IMAGE:845208 3'
762	15424	25878	1.37	2.0E-56	BE084386.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
762	15424	25879	1.37	2.0E-56	BE084386.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
2426	14984	27567	1.32	2.0E-56	M26061.1	NT	Human cGMP phosphodiesterase alpha subunit (CGPR-A) mRNA, complete cds
2426	14984	27568	1.32	2.0E-56	M26061.1	NT	Human cGMP phosphodiesterase alpha subunit (CGPR-A) mRNA, complete cds
3017	15033	28110	1.33	2.0E-56	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
3358	15888		1.2	2.0E-56	AB008681.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
3586	16190	28674	1.34	2.0E-56	AV703184.1	EST_HUMAN	AV703184 ADB Homo sapiens cDNA clone ADBCFG10 5'
7147	19680	32521	1.9	2.0E-56	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
1016	13626		12.77	1.0E-56	AF190630.1	NT	Mesaca fascicularis protein tyrosine phosphatase (PRL-1) mRNA, complete cds
3737	16338	28803	1.67	1.0E-56	AW58833.1	EST_HUMAN	hg23c11.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2846452 3'
3737	16338	28804	1.67	1.0E-56	AW58833.1	EST_HUMAN	hg23c11.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2846452 3'
9868	22363		0.71	1.0E-56	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
9861	22456	35439	1.57	1.0E-56	AW845987.1	EST_HUMAN	RC2-CT0163-220699-001-E02 CT0163 Homo sapiens cDNA
653	13278		1.74	9.0E-57	AW880885.1	EST_HUMAN	QV0-OT0033-070300-152-H03 OT0033 Homo sapiens cDNA
11089	23609	36849	1.82	9.0E-57	AF228497.1	NT	Homo sapiens serine protease 17 (KLK4) gene, complete cds
11089	23609	36850	1.82	9.0E-57	AF228497.1	NT	Homo sapiens serine protease 17 (KLK4) gene, complete cds
11397	23849	36815	2.01	9.0E-57	AB020861.1	NT	Homo sapiens mRNA for cyclin B2, complete cds
15	12684	25150	0.98	8.0E-57	8823349	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
319	12973	25462	2.71	8.0E-57	AW816405.1	EST_HUMAN	QV4-ST0234-181189-037-405 ST0234 Homo sapiens cDNA
917	13530	28048	8.64	8.0E-57	AW264588.1	EST_HUMAN	xr06d10.x1 NCI_CGAP_Bm53 Homo sapiens cDNA clone IMAGE:2759251 3' similar to gb:U05875
1852	14440	26997	1.52	8.0E-57	AA468109.1	EST_HUMAN	INTERFERON-GAMMA RECEPTOR BETA CHAIN PRECURSOR (HUMAN);
3428	16036	28516	1	8.0E-57	4758278	NT	z61b12.1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:757151 5'
3428	16036	28517	1	8.0E-57	4758278	NT	Homo sapiens EphA4 (EPHA4) mRNA
5187	17752	30183	0.8	8.0E-57	BE268916.1	EST_HUMAN	Homo sapiens EphA4 (EPHA4) mRNA
5450	24958	30631	3.17	8.0E-57	11418185	NT	600944440F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2860884 5'
6590	19187	31989	12.5	8.0E-57	AB023177.1	NT	Homo sapiens acinase 2, mitochondrial (AC02), mRNA
6590	19187	31990	12.5	8.0E-57	AB023177.1	NT	Homo sapiens mRNA for KIAA0860 protein, partial cds
7729	20237	33128	2.72	8.0E-57	AB020844.1	NT	Homo sapiens mRNA for KIAA0837 protein, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7728	20237	33128	2.72	8.0E-57	AB020844.1	NT	Homo sapiens mRNA for KIAA0837 protein, partial cds
11351	12694	25150	3.59	8.0E-57	8923349	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
12271	24477	30938	1.41	8.0E-57	11645732	NT	Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
1281	13858	26375	1.16	7.0E-57	AJ003100.1	NT	Homo sapiens GYS2 gene, exon 14
3287	15898	28378	1.08	7.0E-57	7242158	NT	Homo sapiens NME7 (NME7), mRNA
3287	15898	28377	1.08	7.0E-57	7242158	NT	Homo sapiens NME7 (NME7), mRNA
3309	15920	28397	1	7.0E-57	6005978	NT	Homo sapiens Kruppel-like factor 8 (KLF8), mRNA
3946	16544	29011	2.3	7.0E-57	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
3946	16544	29012	2.3	7.0E-57	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
4524	17108		1.06	7.0E-57	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHT) gene, exon 5
12634	24892		5.12	5.0E-57	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
3817	16417	28880	1.06	4.0E-57	AB020888.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
837	13453	25963	1.03	3.0E-57	4507798	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA
1378	13969		39.52	3.0E-57	AA230279.1	EST_HUMAN	nc1307.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:1008037 similar to SW:RS10_HUMAN
2434	15001	27573	1.01	3.0E-57	AA348335.1	EST_HUMAN	P46783 40S RIBOSOMAL PROTEIN S10. ;
2727	15282	27849	0.93	3.0E-57	BE670622.1	EST_HUMAN	EST54770 Hippocampus II Homo sapiens cDNA 5' end
2727	15282	27849	0.93	3.0E-57	BE670622.1	EST_HUMAN	783510.x1 NCI_CGAP_QLL1 Homo sapiens cDNA clone IMAGE:3288443 3' similar to WP:Y47H9C.2
3618	16221	28698	0.93	3.0E-57	AF232708.1	NT	OE20283 ;
3760	16381		60.31	3.0E-57	AW853904.1	EST_HUMAN	763510.x1 NCI_CGAP_QLL1 Homo sapiens cDNA clone IMAGE:3288443 3' similar to WP:Y47H9C.2
6180	18780	31559	1.34	3.0E-57	11225608	NT	CE20283 ;
6272	18880	31648	3.17	3.0E-57	BE786537.1	EST_HUMAN	Homo sapiens cell-line tsA201a chloride ion current inducer protein (Chn) gene, complete cds
8087	20628	33542	3.09	3.0E-57	W28130.1	EST_HUMAN	Homo sapiens cell-line tsA201a chloride ion current inducer protein (Chn) gene, complete cds
8111	20652	33580	2.27	3.0E-57	11545768	NT	RC3-C10254-110300-027-010 C10254 Homo sapiens cDNA
8111	20652	33561	2.27	3.0E-57	11545768	NT	Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA
8223	20784	33881	0.61	3.0E-57	11427757	NT	601588886F1 NIH_MGC 7 Homo sapiens cDNA clone IMAGE:3944302 5
8368	20908	33827	1.18	3.0E-57	J05262.1	NT	4288 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
8792	21331	34255	4.05	3.0E-57	AU117659.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ11658 (FLJ11658), mRNA
9174	21751	34698	0.63	3.0E-57	11545768	NT	Homo sapiens KIAA0849 gene product (KIAA0849), mRNA
							Human farnesyl pyrophosphate synthetase mRNA, complete cds
							AU117659 HEMBA1 Homo sapiens cDNA clone HEMBA1001910 5'
							Homo sapiens hypothetical protein FLJ11658 (FLJ11658), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9174	21751	34897	0.63	3.0E-57	11545798	NT	Homo sapiens hypothetical protein FLJ11656 (FLJ11656), mRNA
10787	23311	36318	3.02	3.0E-57	AW248374.1	EST_HUMAN	2820473.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2820473 5'
11800	25068	30513	7.00	3.0E-57	W23871.1	EST_HUMAN	2b45d11.1 Soares_fetal_lung_NHL19W Homo sapiens cDNA clone IMAGE:306549 5'
12272	24962		1.69	3.0E-57	AW178575.1	EST_HUMAN	RC0-HT0112-080889-001-C08 HT0112 Homo sapiens cDNA
1480	14073	26612	0.88	2.0E-57	AA789004.1	EST_HUMAN	hm25c-10.x1 Soares_NFL_T_G8C_S1 Homo sapiens cDNA clone IMAGE:2157618 3' similar to contains Alu repetitive element;
1548	14140	26673	0.96	2.0E-57	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
1548	14140	26674	0.96	2.0E-57	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
2444	15011	27583	1.15	2.0E-57	BE172526.1	EST_HUMAN	MRO-HT0558-010400-008-h10 HT0559 Homo sapiens cDNA
2758	15311	27877	4.79	2.0E-57	AA845419.1	EST_HUMAN	el02b02.s1 Soares_parathyroid_tumor_Nb-HPA Homo sapiens cDNA clone IMAGE:1404747 3' similar to contains Alu repetitive element; contains element MER22 repetitive element;
3486	16091		2.28	2.0E-57	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
3605	16209	28688	0.71	2.0E-57	R07702.1	EST_HUMAN	yes8h01.r1 Soares_fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:125809 5'
3605	16209	28689	0.71	2.0E-57	R07702.1	EST_HUMAN	yes8h01.r1 Soares_fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:125809 5'
4004	16602	29078	0.62	2.0E-57	BE073284.1	EST_HUMAN	MRO-BT0551-060300-103-b03 BT0551 Homo sapiens cDNA
4608	17191	29637	8.02	2.0E-57	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
5849	18473		1.57	2.0E-57	AA016131.1	EST_HUMAN	2a31c05.r1 Soares_retina_N2b-4HR Homo sapiens cDNA clone IMAGE:360584 5' similar to contains L1.L3 L1 repetitive element;
6184	18784		29.73	2.0E-57	BF115388.1	EST_HUMAN	7n80R04.x1 NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3570386 3' similar to contains TAR1.t1 MER22 repetitive element;
6307	18914	31688	0.73	2.0E-57	11431281	NT	Homo sapiens small inducible cytokine subfamily A (Oye-Oye), member 22 (SCYA22), mRNA
8568	21105	34024	1.22	2.0E-57	AF045452.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
9760	22268	35241	2.65	2.0E-57	AF067722.1	NT	Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, exons 3 and 4
11150	23658	36701	2.05	2.0E-57	11424084	NT	Homo sapiens hypothetical protein FLJ20041 (FLJ20041), mRNA
11150	23658	36702	2.05	2.0E-57	11424084	NT	Homo sapiens hypothetical protein FLJ20041 (FLJ20041), mRNA
11182	23687	36748	1.84	2.0E-57	AJ245503.1	NT	Homo sapiens partial mRNA for PEX5 related protein
11182	23687	36747	1.84	2.0E-57	AJ245503.1	NT	Homo sapiens partial mRNA for PEX5 related protein
8628	21185		3.5	1.0E-57	BE043031.1	EST_HUMAN	hc32a08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3039082 3' similar to TR:000249 000249 HYPOTHETICAL 9.3 KD PROTEIN ;
12049	24333		6.35	1.0E-57	AW470791.1	EST_HUMAN	ha33a006.x1 NCI_CGAP_K1a12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element;
5857	18480	31203	1.02	9.0E-58	AA297947.1	EST_HUMAN	EST11348 Uterus Homo sapiens cDNA 5' and
12335	24518	30822	2.62	9.0E-58	BE395081.1	EST_HUMAN	601309465F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3631000 5'
615	13242		3.87	8.0E-58	BE688715.1	EST_HUMAN	601445948F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3850211 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
682	13308	25789	3.77	8.0E-58	A1798376.1	EST_HUMAN	U34607.x1 NCI_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2220181 3' similar to TR:O15475 O15475
682	13308	25790	3.77	8.0E-58	A1798376.1	EST_HUMAN	UNNAMED HERV-H PROTEIN:
1897	14482	27041	2.82	8.0E-58	11434921	NT	U34607.x1 NCI_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2220181 3' similar to TR:O15475 O15475
1897	14482	27042	2.82	8.0E-58	11434921	NT	UNNAMED HERV-H PROTEIN:
3003	15819		2.94	8.0E-58	7706132	NT	Homo sapiens putative protein O-mannosyltransferase (POMT2), mRNA
10735	23260		6.42	7.0E-58	6174542	NT	Homo sapiens putative protein O-mannosyltransferase (POMT2), mRNA
10809	23332	36344	3.77	7.0E-58	AW504109.1	EST_HUMAN	Homo sapiens DHHC1 protein (LOC51304), mRNA
10809	23332	36345	3.77	7.0E-58	AW504109.1	EST_HUMAN	Homo sapiens MADS box transcription enhancer factor 2, polypeptide B (myocyte enhancer factor 2B) (MEF2B) mRNA
2414	14882	27658	3.39	6.0E-58	AU130889.1	EST_HUMAN	U1HF-BNO-af-g-10-0-UJ1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078867 5'
2028	15542	28017	1.26	6.0E-58	BE242150.1	EST_HUMAN	U1HF-BNO-af-g-10-0-UJ1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078867 5'
2028	15542	28018	1.26	6.0E-58	BE242150.1	EST_HUMAN	AU130889 NT2RP3 Homo sapiens cDNA clone NT2RP3001283 5'
6318	18925	31702	1.15	6.0E-58	AF106911.1	NT	TCAAP1E1219 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP1219
10211	22706	35700	0.99	6.0E-58	11434749	NT	TCAAP1E1219 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP1219
12150	24383		1.87	6.0E-58	11526291	NT	Homo sapiens chemokine MIP-2 gamma (MIP-2 gamma) mRNA, complete cds
322	12976	25464	3.26	5.0E-58	4507334	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type 21 (PTPN21), mRNA
739	13359	25853	5.81	5.0E-58	BE763984.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
1236	13635	26350	3.59	5.0E-58	AW797948.1	EST_HUMAN	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
1236	13635	26351	3.59	5.0E-58	AW797948.1	EST_HUMAN	RC4-NT0057-160800-018-605 NT0057 Homo sapiens cDNA
1237	13635	26350	2.7	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-407 UM0043 Homo sapiens cDNA
1237	13635	26351	2.7	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-407 UM0043 Homo sapiens cDNA
3365	15973	28450	4.17	5.0E-58	AA988183.1	EST_HUMAN	CM3-UM0043-240300-127-407 UM0043 Homo sapiens cDNA
4345	16832	28373	0.76	5.0E-58	AK36745.1	EST_HUMAN	CM3-UM0043-240300-127-407 UM0043 Homo sapiens cDNA
5105	17677		1.12	5.0E-58	AW848834.1	EST_HUMAN	U34607.x1 NCI_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2220181 3' similar to SW:PRO2_ACACA
5811	18435		2.08	5.0E-58	11460282	NT	P18984 PROFILIN II:
6325	18831	31707	5.73	5.0E-58	H23072.1	EST_HUMAN	IL3-CT0214-090300-081-F08 CT0214 Homo sapiens cDNA
6528	19128	31922	0.87	5.0E-58	AL163285.2	NT	Homo sapiens placenta-specific 1 (PLAC1), mRNA
6597	19194	31989	1.24	5.0E-58	11421330	NT	YMS1H07.r1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:52071 5'
7161	19683	32539	0.72	5.0E-58	4885400	NT	Homo sapiens apical protein, Xenopus laevis-like (APXL), mRNA
							Homo sapiens holocytochrome c synthase (cytochrome c heme-lyase) (HCCS) mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7910	20452	33359	9.87	5.0E-58	8822693	NT	Homo sapiens hypothetical protein FLJ10828 (FLJ10828), mRNA
8294	20835	33757	0.74	5.0E-58	AB048837.1	NT	Homo sapiens mRNA for KIAA1817 protein, partial cds
9283	21789	34739	0.72	5.0E-58	5231227	NT	Homo sapiens ribonuclease 6 precursor (RNASE6PL), mRNA
9283	21789	34740	0.72	5.0E-58	5231227	NT	Homo sapiens ribonuclease 6 precursor (RNASE6PL), mRNA
9771	22289	35253	0.74	5.0E-58	11430647	NT	Homo sapiens pre-mRNA splicing factor similar to S. cerevisiae Ptp18 (PRP18), mRNA
10030	22525	35521	1.39	5.0E-58	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
10300	22794	35784	0.59	5.0E-58	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
10300	22794	35785	0.59	5.0E-58	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
11859	24987		0.17	5.0E-58	11528283	NT	Homo sapiens cat eye syndrome chromosome region, candidate 1 (CECR1), mRNA
12331	25018		1.81	5.0E-58	11428423	NT	Homo sapiens acetyl-Coenzyme A carboxylase alpha (ACACA), mRNA
12577	24873		1.34	5.0E-58	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12653	24725	30853	1.37	5.0E-58	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12653	24725	30854	1.37	5.0E-58	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
396	13042	25532	5.55	4.0E-58	4502302	NT	Homo sapiens ATP synthase, H ⁺ transporting, mitochondrial F1 complex, O subunit (atgomyelin sensitivity conferring protein) (ATP5O), mRNA
829	13446	25953	1.78	4.0E-58	4504634	NT	Homo sapiens Interleukin 10 receptor, beta (IL10RB), mRNA
1517	14109	26845	1.86	4.0E-58	4503648	NT	Homo sapiens coagulation factor IX (plasma thromboplastic component, Christmas disease, hemophilia B) (F9), mRNA
2611	15173	27741	1.13	4.0E-58	AF265555.1	NT	Homo sapiens ubiquitin-conjugating BIR-domain enzyme APOLLON mRNA, complete cds
2660	15219	27790	1.75	4.0E-58	U36251.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 3
3367	15975	28452	1.62	4.0E-58	D16470.1	NT	Human mRNA, Xq terminal portion
3803	18403	28867	1.26	4.0E-58	5031660	NT	Homo sapiens EGF-like repeats and discoidin like domains 3 (EDIL3), mRNA
11221	23724	36779	9.32	4.0E-58	11424059	NT	Homo sapiens E1B-55kDa-associated protein 5 (E1B-AP5), mRNA
357	13006		1.77	3.0E-58	R17879.1	EST_HUMAN	Y91062.1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31693 5'
1433	14026	26554	2.23	3.0E-58	4758981	NT	Homo sapiens peptide YY (PYY) mRNA
3059	15675		0.73	3.0E-58	R17879.1	EST_HUMAN	Y91062.1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31693 5'
3212	15824	29300	3.1	3.0E-58	BF568848.1	EST_HUMAN	602185789F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4308943 5'
3212	15824	29301	3.1	3.0E-58	BF568848.1	EST_HUMAN	602185789F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4308943 5'
6407	18010	31782	0.72	3.0E-58	BE088509.1	EST_HUMAN	QV0-BT0702-170400-194-89 BT0702 Homo sapiens cDNA
6572	19170	31967	0.98	3.0E-58	F07056.1	EST_HUMAN	HSCIT G081 normalized infant brain cDNA Homo sapiens cDNA clone c-1508
6751	18344	32151	1.25	3.0E-58	AV712977.1	EST_HUMAN	AV712977 DCA Homo sapiens cDNA clone DCAAZG04 5'
976	13588	26103	8.92	2.0E-58	AF068024.1	NT	Homo sapiens 6-aminolevulinic synthase 2 (ALAS2) gene, complete cds

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Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1333	13927		30.8	2.0E-58	BE208532.1	EST_HUMAN	bas08007.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823733 5' similar to gb:X69391.60S RIBOSOMAL PROTEIN L8 (HUMAN); gb:X81987 M.musculus mRNA for TAX responsive element binding protein (MOUSE);
5539	18171	30586	0.75	2.0E-58	AW074831.1	EST_HUMAN	xs08008.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2587704 3'
5560	24745	30607	4.01	2.0E-58	BE907186.1	EST_HUMAN	601498861F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3901911 5'
5560	24745	30637	4.01	2.0E-58	BE907186.1	EST_HUMAN	601498861F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3901911 5'
6207	18817	31588	1.28	2.0E-58	BF513488.1	EST_HUMAN	UHH-BW1-ams-g-11-Q-Ji.at NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071060 3'
							arr57602.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1539674 3' similar to WP-ZK328.1 CE05085 UBIQUITIN CONJUGATING ENZYME; RECOVERIN SUBFAMILY OF EF-HAND CALCIUM BINDING PROTEIN;
6270	18878	31646	2.1	2.0E-58	A124874.1	EST_HUMAN	yo08006.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:198379 5'
6302	18909	31681	0.88	2.0E-58	R82567.1	EST_HUMAN	qm84001.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1895424 3'
7006	19504	32323	1	2.0E-58	A1291407.1	EST_HUMAN	Homo sapiens endocytic receptor Endo180 (ENDO180) mRNA, complete cds
7210	19741	32584	2.91	2.0E-58	AF134838.1	NT	Homo sapiens endocytic receptor Endo180 (ENDO180) mRNA, complete cds
7210	19741	32595	2.91	2.0E-58	AF134838.1	NT	Homo sapiens endocytic receptor Endo180 (ENDO180) mRNA, complete cds
10620	23152	36164	19.73	2.0E-58	BF307745.1	EST_HUMAN	601880812F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131881 5'
10844	23365	36381	2.67	2.0E-58	AW872641.1	EST_HUMAN	hm25f08.x1 NCI_CGAP_Thy4 Homo sapiens cDNA clone IMAGE:3013671 3'
751	13371	25885	4.83	1.0E-58	M85134.1	NT	Human complement component C5 mRNA, 3'end
1106	13710	26219	5.91	1.0E-58	6274549	NT	Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9 (22kD, B22) (NDUFB9), mRNA
1372	13966	26492	1.24	1.0E-58	AW957182.1	EST_HUMAN	EST368252 IMAGE resequences, MAGD Homo sapiens cDNA
1372	13966	26493	1.24	1.0E-58	AW957182.1	EST_HUMAN	EST368252 IMAGE resequences, MAGD Homo sapiens cDNA
1440	14033	26561	2.04	1.0E-58	AJ238083.1	NT	Homo sapiens partial AF-4 gene, exons 2 to 7 and Alu repeat elements
1704	14297	26834	0.9	1.0E-58	BE460132.1	EST_HUMAN	hy10f08.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:3168835 3'
2828	15380	27850	1.17	1.0E-58	4759169	NT	Homo sapiens steroid regulatory element binding transcription factor 2 (SREBF2) mRNA
3590	16194	28679	0.82	1.0E-58	4759081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
3590	16194	28680	0.82	1.0E-58	4759081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
3783	16383	28848	0.57	1.0E-58	4507628	NT	Homo sapiens transition protein 1 (during histone to protamine replacement) (TNPI1) mRNA
5108	17678	30117	8.84	1.0E-58	A1141083.1	EST_HUMAN	caz4h01.x1 Soares_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:1678129 3'
6007	18827	31362	1.2	1.0E-58	BE061880.1	EST_HUMAN	RC1-BT0254-290100-016-e01 BT0254 Homo sapiens cDNA
6948	19523	32345	0.73	1.0E-58	11422031	NT	Homo sapiens hypothetical protein (LOC51280), mRNA
8803	21342	34288	0.7	1.0E-58	4506314	NT	Homo sapiens myomesin (M-protein) 2 (165kD) (MYOM2), mRNA
8912	21450	34371	0.83	1.0E-58	AV751001.1	EST_HUMAN	AV751001 NPC Homo sapiens cDNA clone NPCACH09 5'
9010	21547	34475	0.65	1.0E-58	AA412397.1	EST_HUMAN	289905.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:730497 5'
9010	21547	34476	0.65	1.0E-58	AA412397.1	EST_HUMAN	289905.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:730497 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10089	22584	35577	0.55	1.0E-58	11432894	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chap-syn-110) (DLG2), mRNA
11610	24053		5.43	1.0E-58	X03392.1	NT	H. sapiens Immunoglobulin kappa light chain variable region L14
2273	14847	27423	18.05	8.0E-58	4507378	NT	Homo sapiens TATA box binding protein (TBP) mRNA
8121	20662	33572	2.08	8.0E-58	A1761963.1	EST_HUMAN	wh50408.x1 NCI CGAP Kd11 Homo sapiens cDNA clone IMAGE:2384171 3'
190	15409		2.18	8.0E-58	BF035327.1	EST_HUMAN	601458331F1 NIH_MGC 86 Homo sapiens cDNA clone IMAGE:3802088 5'
8188	20729	33841	0.58	6.0E-58	A1750970.1	EST_HUMAN	cr08h02.y1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cr08h02 random
1780	14380	28824	1.32	5.0E-58	AW157281.1	EST_HUMAN	au63h05.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783865 3' similar to
1780	14380	28825	1.32	5.0E-58	AW157281.1	EST_HUMAN	TR:O75788 O75788 GANGLIOSIDE-INDUCED DIFFERENTIATION ASSOCIATED PROTEIN 1.;
3161	15775	28243	7.81	5.0E-58	A1807484.1	EST_HUMAN	au63h05.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783865 3' similar to
4782	17343	28781	4.42	5.0E-58	X83497.1	EST_HUMAN	TR:O75788 O75788 GANGLIOSIDE-INDUCED DIFFERENTIATION ASSOCIATED PROTEIN 1.;
5888	18509	31235	0.81	5.0E-58	6005698	NT	wf48c11.x1 Soares_NFL_T_G8C_S1 Homo sapiens cDNA clone IMAGE:2358836 3'
7084	18083	30440	8.32	6.0E-58	AW162304.1	EST_HUMAN	H. sapiens DNA for ZNF80-linked ERV9 long terminal repeat
8741	21280	34203	1.35	5.0E-58	11421778	NT	Homo sapiens ataxin 2 related protein (AZLP), mRNA
9021	22121	35085	1.85	5.0E-58	AV762889.1	EST_HUMAN	au68c07.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781228 3' similar to contigs
10788	23310	38317	3.47	5.0E-58	11434808	NT	element TAR1 repetitive element :
828	13443	25851	2.85	4.0E-58	D80006.1	NT	Homo sapiens polymerase (RNA) III (DNA directed) (39kD) (RPC39), mRNA
5728	18354	31058	1.22	4.0E-58	11034810	NT	AV762889 MDS Homo sapiens cDNA clone MDSEIC12 5'
12004	24817		5.54	4.0E-58	AF057720.1	NT	Homo sapiens hypothetical protein (LOC57143), mRNA
10	12889		4.75	3.0E-58	AW965524.1	EST_HUMAN	Human mRNA for KIAA0184 gene, partial cds
245	12804	25385	3.88	3.0E-58	7882247	NT	Homo sapiens catenin (cadherin-associated protein), delta 2 (neural placophilin-related arm-repeat protein) (CTNND2), mRNA
1748	14338	28884	8.2	3.0E-58	4505880	NT	Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, promoter region and exon 1
1748	14338	28885	8.2	3.0E-58	4505880	NT	EST377582 IMAGE resequences, MAGI Homo sapiens cDNA
2174	14751	27920	7.15	3.0E-58	AB029035.1	NT	Homo sapiens KIAA0680 gene product (KIAA0680), mRNA
2174	14751	27921	7.15	3.0E-58	AB029035.1	NT	Homo sapiens plasminogen activator, tissue (PLATa) mRNA
2708	15477	27920	1.29	3.0E-58	AF232289.1	NT	Homo sapiens plasminogen activator, tissue (PLATa) mRNA
3074	15889	28161	0.77	3.0E-58	T18885.1	EST_HUMAN	Homo sapiens mRNA for KIAA1112 protein, partial cds
3074	15889	28162	0.77	3.0E-58	T18885.1	EST_HUMAN	Homo sapiens mRNA for KIAA1112 protein, partial cds
3163	15777	28247	4.67	3.0E-58	4502014	NT	Homo sapiens NF1-2 pseudogene, exon 17

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3163	15777	28248	4.67	3.0E-59	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3897	16498	28958	1.12	3.0E-59	4508044	NT	Homo sapiens zona pellucida glycoprotein 2 (sperm receptor) (ZP2) mRNA
4786	17374	29828	0.98	3.0E-59	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4987	17541	29884	1.33	3.0E-59	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA
6389	18973	31751	2.1	3.0E-59	8924074	NT	Homo sapiens hypothetical protein PRO1741 (PRO1741), mRNA
7395	19920	32785	1.87	3.0E-59	5454137	NT	Homo sapiens nuclear receptor co-repressor 1 (NCOR1), mRNA
7872	20414	33321	1.28	3.0E-59	X12558.1	NT	Human mRNA for dbi proto-oncogene
7872	20414	33322	1.26	3.0E-59	X12558.1	NT	Human mRNA for dbi proto-oncogene
9057	22452	35433	1.04	3.0E-59	X70251.1	NT	H. sapiens CKII-alpha gene
9057	22452	35434	1.04	3.0E-59	X70251.1	NT	H. sapiens CKII-alpha gene
11980	24291		1.28	3.0E-59	11417868	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA
12130	24386		9.09	3.0E-59	11417868	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA
6044	18683	31402	0.98	2.0E-59	BF509383.1	EST_HUMAN	UI-H-B14-ay-b-02-Q.U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086522 3'
6044	18683	31403	0.98	2.0E-59	BF509383.1	EST_HUMAN	UI-H-B14-ay-b-02-Q.U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086522 3'
9555	22055		5.27	2.0E-59	AA308774.1	EST_HUMAN	EST180633 Jurkat T-cells V Homo sapiens cDNA 5' end
10419	22913		1.34	2.0E-59	BF365554.1	EST_HUMAN	RCO-NT0038-100700-032-407 NT0038 Homo sapiens cDNA
10710	23238	36252	2.49	2.0E-59	AW410688.1	EST_HUMAN	fh07h04.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2981654 5'
10710	23238	36253	2.49	2.0E-59	AW410688.1	EST_HUMAN	fh07h04.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2981654 5'
11879	24228	31046	5.76	2.0E-59	AI631809.1	EST_HUMAN	wa39c12.x1 NCI_CGAP_Ku111 Homo sapiens cDNA clone IMAGE:2300182 3' similar to TR:Q86542
12437	24943	30621	2.86	2.0E-59	L11645.1	NT	Q86542 RTVL-H PROTEIN, contains LTR7 b1 LTR7 repetitive element;
174	12837		18.31	1.0E-59	BE268411.1	EST_HUMAN	Homo sapiens alpha-tubulin mRNA, complete cds
2516	15080	27652	1.02	1.0E-59	AI139341.1	EST_HUMAN	601176757F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531927 5'
2516	15080	27653	1.02	1.0E-59	AI139341.1	EST_HUMAN	qc21c08.x1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:1710254 3'
							qc21c08.x1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:1710254 3'
							ca56h11.s1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1308028 3' similar to TR:Q13537
							Q13537 MER37 TRANSDUCIBLE ELEMENT, COMPLETE CONSENSUS SEQUENCE.
2649	15208		1.45	1.0E-59	AA748468.1	EST_HUMAN	Homo sapiens mRNA for transcription factor
7563	20080	32956	1.98	1.0E-59	AJ130894.1	NT	601111851F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352682 5'
7703	20212	33100	0.83	1.0E-59	BE256814.1	EST_HUMAN	601111851F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352682 5'
7703	20212	33101	0.83	1.0E-59	BE256814.1	EST_HUMAN	Homo sapiens zinc finger protein 276 (ZNF276), mRNA
9307	21907	34855	1.2	1.0E-59	11418630	NT	Homo sapiens 3-hydroxyisobutyryl-Coenzyme A hydrolase (HIBCH), mRNA
9522	22022	34979	0.82	1.0E-59	11428849	NT	Homo sapiens 3-hydroxyisobutyryl-Coenzyme A hydrolase (HIBCH), mRNA
9522	22022	34980	0.82	1.0E-59	11428849	NT	Homo sapiens mRNA for transcription factor
10734	20080	32956	9.52	1.0E-59	AJ130894.1	NT	Homo sapiens mRNA for transcription factor
785	13413	25917	1.28	8.0E-60	AW977845.1	EST_HUMAN	EST389849 IMAGE resequences, MAGO Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1520	14112	26848	3.21	8.0E-60	4758158	NT	Homo sapiens small nuclear ribonucleoprotein D3 polypeptide (18kD) (SNRPD3) mRNA
2216	14791	27364	1.95	8.0E-60	5174656	NT	Homo sapiens differentiation-related gene 1 (nickel-specific induction protein) (RTP) mRNA
2216	14791	27365	1.95	8.0E-60	5174656	NT	Homo sapiens differentiation-related gene 1 (nickel-specific induction protein) (RTP) mRNA
6135	18748	31508	1.01	8.0E-60	AB023004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
6828	19224	32029	1.85	8.0E-60	S83182.1	NT	hyaluronan-binding protein=hepatocyte growth factor activator homolog [human, plasma, mRNA, 2408 nt]
7684	20195	33083	0.76	8.0E-60	11420841	NT	Homo sapiens phosphatidyltransferase 1, choline, beta isoform (PCYT1B), mRNA
7908	20448	33355	2.68	8.0E-60	X17033.1	NT	Human mRNA for integrin alpha-2 subunit
8889	21408	34332	4.03	8.0E-60	11428949	NT	Homo sapiens S-enkephalin; retina and pineal gland (arrestin) (SAG), mRNA
8382	21815	34764	0.88	8.0E-60	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
8382	21815	34765	0.88	8.0E-60	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10465	22858	35868	0.68	8.0E-60	5453987	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
10712	23240	36255	5.93	8.0E-60	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
10712	23240	36256	5.93	8.0E-60	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
784	13403	25807	12.12	7.0E-60	AF050066.1	NT	Homo sapiens MHC class 1 region
785	13403	25807	52.6	7.0E-60	AF050066.1	NT	Homo sapiens MHC class 1 region
848	13484	25872	1.28	7.0E-60	4504634	NT	Homo sapiens interleukin 10 receptor, beta (IL10RB), mRNA
2173	14750	27319	1.95	7.0E-60	AF077188.1	NT	Homo sapiens cullin 4A (CUL4A) mRNA, complete cds
4258	16844	28283	2.74	7.0E-60	4505488	NT	Homo sapiens ornithine decarboxylase 1 (ODC1) mRNA
8328	21842	34794	3.6	7.0E-60	H58041.1	EST_HUMAN	y1204.r1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205087 5' similar to contains LTR5 repetitive element ;
11243	23773	36830	1.87	7.0E-60	H58041.1	EST_HUMAN	y1204.r1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205087 5' similar to contains LTR5 repetitive element ;
8378	20916		7.58	8.0E-60	H52458.1	EST_HUMAN	y178109.r1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:201953 5' similar to contains OFR repetitive element ;
87	12783	25245	1.13	5.0E-60	AI807917.1	EST_HUMAN	wf52c07.x1 Scores NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2359212 3'
87	12783	25246	1.13	5.0E-60	AI807917.1	EST_HUMAN	wf52c07.x1 Scores NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2359212 3'
3000	15616		1.47	4.0E-60	AA289037.1	EST_HUMAN	EST11488 Uterus Homo sapiens cDNA 5' end similar to similar to retrovirus-related pol
7390	18915	32778	0.7	4.0E-60	BF196068.1	EST_HUMAN	h81f05.x1 NC1_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134913 3' similar to SW:RHOP_MOUSE
8054	21591		0.62	4.0E-60	AL163278.2	NT	Q61085 GTP-RHO BINDING PROTEIN 1 ;
1899	14484	27044	5.26	3.0E-60	BE562611.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C078
1899	14484	27045	5.26	3.0E-60	BE562611.1	EST_HUMAN	601336446F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3690395 5'
1910	14485		2.4	3.0E-60	6031190	NT	601336446F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3690395 5'
							Homo sapiens prohibitin (PHB) mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4556	17139	28587	1.88	3.0E-60	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region, segment 1/2
5822	18448	31168	2.04	3.0E-60	AW636186.1	EST_HUMAN	RC3-LT0023-200100-012-e01 LT0023 Homo sapiens cDNA
7034	18064	30477	1	3.0E-60	AF782814.1	EST_HUMAN	cd80h11.y6 NCI_CGAP_Kd3 Homo sapiens cDNA clone IMAGE:1534053 5' similar to SW:UDP_MOUSE P52824 URIDINE PHOSPHORYLASE;
8341	20882	33802	5.3	3.0E-60	5174844	NT	Homo sapiens prolidase dehydrogenase (proline oxidase) (PRODH) mRNA
8341	20882	33803	5.3	3.0E-60	5174844	NT	Homo sapiens prolidase dehydrogenase (proline oxidase) (PRODH) mRNA
8519	21058	33981	0.51	3.0E-60	A040235.1	EST_HUMAN	α56c09.x1 Soares NIH-MP-u S1 Homo sapiens cDNA clone IMAGE:1860337 3' similar to SW:FORM_MOUSE Q05880 FORMIN;
8677	21216	34136	4.75	3.0E-60	5174844	NT	Homo sapiens prolidase dehydrogenase (proline oxidase) (PRODH) mRNA
12520	24980		1.71	3.0E-60	AA485288.1	EST_HUMAN	ab07h04.r1 Streptococcus (8037210) Homo sapiens cDNA clone IMAGE:840151 5' similar to contains LTR10.H1 LTR10 repetitive element;
33	12712	28171	2.84	2.0E-60	AY008285.1	NT	Homo sapiens solute carrier (SLC25A18) mRNA, complete cds; nuclear gene for mitochondrial product
1470	14082	26587	2.88	2.0E-60	Z11894.1	NT	H. sapiens 41kDa protein kinase related to rat ERK2
1758	14349	26893	1.24	2.0E-60	M24603.1	NT	Human bcr protein mRNA, 5' end
3638	18241	28717	0.72	2.0E-60	4757867	NT	Homo sapiens v-raf murine sarcoma viral oncogene homolog B1 (BRAF) mRNA
3887	18585	28058	0.78	2.0E-60	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
4203	16782		0.85	2.0E-60	BF513458.1	EST_HUMAN	UH-BW1-eme-05-0-UL.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3070952 3'
6443	18045	31833	0.84	2.0E-60	AJ791862.1	EST_HUMAN	nm0112.y6 NCI_CGAP_Co8 Homo sapiens cDNA clone IMAGE:1076465 5' similar to contains THR.11 THR repetitive element;
6818	19215	32020	1.65	2.0E-60	AF004677.1	NT	Homo sapiens pro-alpha 2(I) collagen (COL1A2) gene, complete cds
6818	19407	32224	0.89	2.0E-60	AF157478.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
6834	18042	30486	2.08	2.0E-60	4503044	NT	Homo sapiens corticotropin releasing hormone receptor 2 (CRHR2) mRNA
6834	18042	30487	2.08	2.0E-60	4503044	NT	Homo sapiens corticotropin releasing hormone receptor 2 (CRHR2) mRNA
7164	18686	32542	8.14	2.0E-60	AA311159.1	EST_HUMAN	EST181949 Jurkat T-cells V Homo sapiens cDNA 5' end similar to similar to prolargin, alpha
7164	18686	32543	8.14	2.0E-60	AA311159.1	EST_HUMAN	EST181949 Jurkat T-cells V Homo sapiens cDNA 5' end similar to similar to prolargin, alpha
7828	20140		1.05	2.0E-60	BF512808.1	EST_HUMAN	UH-BW1-eme-02-0-UL.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071210 3'
7847	20489	33389	1.05	2.0E-60	X85597.1	EST_HUMAN	HS15BEST human adult testis Homo sapiens cDNA clone CAM_EST15
8801	21340	34267	3.38	2.0E-60	L38033.1	NT	Human pre-B cell stimulating factor homologue (SDF1b) mRNA, complete cds
9888	22385	35382	2.67	2.0E-60	11881659	NT	Homo sapiens sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaforin) 8A (SEMA8A), mRNA
9888	22385	35383	2.67	2.0E-60	11881659	NT	Homo sapiens sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaforin) 8A (SEMA8A), mRNA
12188	24407		3.98	2.0E-60	11418192	NT	Homo sapiens non-histone chromosome protein 2 (S. cerevisiae)-like 1 (NHP2L1), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12309	24908		1.71	2.0E-60	AF068757.1	NT	Homo sapiens somatostatin receptor subtype 3 (SSTR3) gene, 5' flanking region and partial cds
12311	24503		1.88	2.0E-60	11418068	NT	Homo sapiens similar to HSPC022 protein (H. sapiens) (LOC63504), mRNA
12329	24515		1.95	2.0E-60	AB011389.1	NT	Homo sapiens gene for AF-8, complete cds
548	13178	25657	0.92	1.0E-60	BE178596.1	EST_HUMAN	PM3-HT0605-270200-001-e08 HT0605 Homo sapiens cDNA
3970	16568	29037	0.95	1.0E-60	AU143389.1	EST_HUMAN	AU143389 Y78AA1 Homo sapiens cDNA clone Y78AA1001854 5'
5091	17684	30104	1.32	1.0E-60	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
7889	20431	33340	0.73	1.0E-60	BE064410.1	EST_HUMAN	RC4-BT0311-141189-011-h08 BT0311 Homo sapiens cDNA
8690	21229		2.93	1.0E-60	AA244041.1	EST_HUMAN	nc04e12.1 NC1 CGAP_FY1 Homo sapiens cDNA clone IMAGE:1007182 similar to contains L1.11 L1 repetitive element;
8717	21268	34176	1.51	1.0E-60	AV754081.1	EST_HUMAN	AV754081 TP Homo sapiens cDNA clone TPGAED05 5'
1138	13741	26250	2.37	9.0E-61	AU118944.1	EST_HUMAN	AU118944 HEMBA1 Homo sapiens cDNA clone HEMBA1005683 5'
2694	15251	27821	1.11	8.0E-61	AW006478.1	EST_HUMAN	W05b10.x1 NC1 CGAP_Co3 Homo sapiens cDNA clone IMAGE:2506555 3'
2694	15251	27822	1.11	8.0E-61	AW006478.1	EST_HUMAN	W05b10.x1 NC1 CGAP_Co3 Homo sapiens cDNA clone IMAGE:2506555 3'
2978	15594		2.53	8.0E-61	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
7836	20378	33284	0.79	8.0E-61	AA593988.1	EST_HUMAN	nt59g06.s1 NC1 CGAP_Lar1 Homo sapiens cDNA clone IMAGE:1088218 3'
133	12789	25286	0.99	7.0E-61	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
133	12789	25287	0.99	7.0E-61	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
287	12943	25428	3.39	8.0E-61	BE409310.1	EST_HUMAN	601300838F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
844	13460	25689	2.13	8.0E-61	BE409310.1	EST_HUMAN	601300838F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
1366	13960	26485	13.81	6.0E-61	AF119660.1	NT	Homo sapiens PRO2014 mRNA, complete cds
1672	14264	26788	0.91	6.0E-61	BE257400.1	EST_HUMAN	601108238F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350145 5'
1689	14281	26816	2.23	6.0E-61	AA596033.1	EST_HUMAN	nt68h09.s1 NC1 CGAP_Lar1 Homo sapiens cDNA clone IMAGE:1088897 3'
2172	14749	27318	0.93	6.0E-61	AY008285.1	NT	Homo sapiens solute carrier (SLC25A18) mRNA, complete cds; nuclear gene for mitochondrial product
3347	15957	28433	11.8	6.0E-61	AU130689.1	EST_HUMAN	AU130689 NT2RP3 Homo sapiens cDNA clone NT2RP3001283 5'
6182	18792	31581	3.08	6.0E-61	S79249.1	NT	Ig-beta/B-2=CD79b (alternatively spliced) [human, B cells, mRNA Partial, 375 nt]
7380	18906	32771	1.71	6.0E-61	U24498.1	NT	Human autosomal dominant polycystic kidney disease protein 1 (PKD1) gene
7614	20127	33004	1.95	6.0E-61	AF035737.1	NT	Homo sapiens general transcription factor 2-1 (GTF2) mRNA, complete cds
12065	13460	25689	1.38	6.0E-61	BE409310.1	EST_HUMAN	601300838F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
236	12898	25379	2.08	5.0E-61	8922990	NT	Homo sapiens hypothetical protein FLJ11316 (FLJ11316), mRNA
236	12898	25380	2.06	5.0E-61	8922990	NT	Homo sapiens hypothetical protein FLJ11316 (FLJ11316), mRNA
382	13028	25517	0.61	6.0E-61	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
1718	14310	26849	2.36	5.0E-61	4508008	NT	Homo sapiens protein phosphatase 1, regulatory subunit 10 (PPP1R10) mRNA
3071	15688	28158	1.9	5.0E-61	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21C079

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4053	16650		1.91	5.0E-61	AL229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
5144	13028	25517	0.89	5.0E-61	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
11856	24215		4.95	4.0E-61	AV731140.1	EST_HUMAN	AV731140 HTF Homo sapiens cDNA clone HTFARB01 5'
4292	16878	28325	0.98	3.0E-61	BE398279.1	EST_HUMAN	601309785F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3631220 5'
8300	20900	33821	0.83	3.0E-61	AF150190.1	EST_HUMAN	AF150190 Human mRNA from cd34+ stem cells Homo sapiens cDNA clone CBDAGB04
8629	21168	34083	0.51	3.0E-61	AA301233.1	EST_HUMAN	EST14323 Testis tumor Homo sapiens cDNA 5' end
8629	21168	34084	0.51	3.0E-61	AA301233.1	EST_HUMAN	EST14323 Testis tumor Homo sapiens cDNA 5' end
524	13158	25638	1.29	2.0E-61	8922829	NT	Homo sapiens hypothetical protein FLJ11028 (FLJ11028), mRNA
1254	13851	26388	1.98	2.0E-61	BE168410.1	EST_HUMAN	QV3-HT0513-060400-147-401 HT0513 Homo sapiens cDNA
1254	13851	26388	1.98	2.0E-61	BE168410.1	EST_HUMAN	QV3-HT0513-060400-147-401 HT0513 Homo sapiens cDNA
1705	14298	26835	1.22	2.0E-61	IN53039.1	EST_HUMAN	y63d11.s1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:246453 3' similar to
2687	15225		1.54	2.0E-61	N39397.1	EST_HUMAN	y63d11.s1 Soares melanocyte 2N6HM Homo sapiens cDNA clone IMAGE:270189 5'
6557	19155	31951	0.85	2.0E-61	11426188	NT	Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) non-catalytic accessory protein 1A (1101106K) (ATP6N1A), mRNA
8945	21483	34408	1.01	2.0E-61	AV694317.1	EST_HUMAN	AV694317 GKC Homo sapiens cDNA clone GKCELG08 5'
9491	21880		1.55	2.0E-61	AB011108.1	NT	Homo sapiens mRNA for KIAA0636 protein, partial cds
9836	22334	35316	1.59	2.0E-61	AW500298.1	EST_HUMAN	UI-HF-BNO-ekd-f-12-Q-UJ.s1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076774 5'
10149	22844	35636	1.90	2.0E-61	11421778	NT	Homo sapiens polymerase (RNA) III (DNA directed) (38kD) (RPOC38), mRNA
10784	23288		9.83	2.0E-61	11419729	NT	Homo sapiens ribosomal protein L44 (RPL44), mRNA
460	13094		0.91	1.0E-61	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
805	13422	25928	1.25	1.0E-61	5453829	NT	Homo sapiens origin recognition complex, subunit 2 (yeast homolog)-like (ORC2L) mRNA
1443	14038	28665	0.98	1.0E-61	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
1898	14483	27043	3.87	1.0E-61	6005883	NT	Homo sapiens zona pellucida glycoprotein 3A (sperm receptor) (ZP3A), mRNA
2238	14813	27385	1.55	1.0E-61	AW827281.1	EST_HUMAN	Jan11009.y1 NCJ_CGAP_L15 Homo sapiens cDNA clone IMAGE:2683369 5' similar to contains element
3422	16030	28511	0.88	1.0E-61	7682319	NT	MSR1 repetitive element;
4534	17118	28584	1.48	1.0E-61	4758249	NT	Homo sapiens KIAA0806 gene product (KIAA0806), mRNA
4534	17118	28585	1.48	1.0E-61	4758249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
4892	17556	28988	10.61	1.0E-61	AW288181.1	EST_HUMAN	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
4892	17556	28988	10.61	1.0E-61	AW288181.1	EST_HUMAN	UI-HBW0-ekt-b-08-Q-UJ.s1 NCJ_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2732871 3'
5888	18490	31216	0.89	1.0E-61	7682303	NT	UI-HBW0-ekt-b-08-Q-UJ.s1 NCJ_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2732871 3'
6043	18682	31401	1.17	1.0E-61	11416891	NT	Homo sapiens KIAA0783 gene product (KIAA0783), mRNA
6981	19479	32300	8.17	1.0E-61	M30135.1	NT	Homo sapiens survival of motor neuron 1, telomeric (SMN1), mRNA
							Human P40 T-cell and mast cell growth factor (HP40) gene, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7148	19681	32522	0.73	1.0E-61	4759171	NT	Homo sapiens SC35-interacting protein 1 (SRBP129), mRNA
7242	19771	32627	1.54	1.0E-61	8823130	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
7242	19771	32628	1.54	1.0E-61	8823130	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
8075	20617	33531	6.29	1.0E-61	11034940	NT	Homo sapiens growth hormone releasing hormone (GHRH), mRNA
8255	20798	33713	3.19	1.0E-61	AF224989.1	NT	(UBE2D3) genes, complete cds
9206	21723		2.29	1.0E-61	AW888726.1	EST_HUMAN	MR0-BN0070-040400-010-001 BN0070 Homo sapiens cDNA
9279	21805	34756	1.1	1.0E-61	11416280	NT	Homo sapiens cadherin 18 (CDH18), mRNA
9842	22437	35414	5.78	1.0E-61	11428882	NT	Homo sapiens KIAA0871 protein (KIAA0871), mRNA
10514	23052	36063	2.82	1.0E-61	11425578	NT	Homo sapiens actinin, alpha 4 (ACTN4), mRNA
11751	24086		1.58	1.0E-61	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
11783	24955	30629	3.23	1.0E-61	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
11783	24955	30630	3.23	1.0E-61	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12173	24412	30845	1.61	1.0E-61	M20809.1	NT	Homo sapiens kappe-immunoglobulin germline pseudogene (Chr1) variable region (subgroup V kappa I)
12404	24822	30891	17.77	1.0E-61	11418127	NT	Homo sapiens GTP binding protein 1 (GTPBP1), mRNA
10259	22754	35742	1.82	9.0E-62	BE084388.1	EST_HUMAN	RC4-BT0310-110300-015-10 BT0310 Homo sapiens cDNA
4849	17231	29688	1.03	8.0E-62	AA830420.1	EST_HUMAN	cc68h11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1354725 3' similar to SW:POL_MLVRK
12652	24724		1.69	8.0E-62	AA768861.1	EST_HUMAN	P31798 POL POLYPYRROLINE
1146	13749	26258	1.31	7.0E-62	AV714334.1	EST_HUMAN	n276g01.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1301328 3'
3554	18168	28841	0.7	7.0E-62	P17480	SWISSPROT	AV714334 DCB Homo sapiens cDNA clone DCBAMA08 5'
6075	18682	31438	0.86	7.0E-62	11427965	NT	NUCLEOLAR TRANSCRIPTION FACTOR 1 (UPSTREAM BINDING FACTOR 1) (UBF-1) (AUTOANTIGEN NOR-80)
11229	23760	36816	5.72	7.0E-62	AI208681.1	EST_HUMAN	Homo sapiens hypothetical protein (FLJ20261), mRNA
3029	15845		1.6	6.0E-62	U09410.1	NT	qq58a04.x1 Soares_testis_NBT Homo sapiens cDNA clone IMAGE:1839150 3' similar to TR:O15103
3431	16039		4.87	6.0E-62	11418255	NT	O15103 HYPOTHETICAL 27.3 KD PROTEIN. ;
7621	20134	33011	3.43	6.0E-62	AI762801.1	EST_HUMAN	Human zinc finger protein ZNF131 mRNA, partial cds
7621	20134	33012	3.43	6.0E-62	AI762801.1	EST_HUMAN	Homo sapiens CGI-58 protein (CGI-58), mRNA
8030	20572		0.75	6.0E-62	AW501124.1	EST_HUMAN	w044002.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2389251 3'
8200	20741	33654	1.35	6.0E-62	11431139	NT	w044002.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2389251 3'
8276	21802	34752	3.92	6.0E-62	AW814393.1	EST_HUMAN	U1-HF-BF0p-ait-d-09-Q-U1.1 NIH_MGC_51 Homo sapiens cDNA clone IMAGE:3072833 5'
441	13074	25569	1.99	5.0E-62	AI950528.1	EST_HUMAN	Homo sapiens CGI-18 protein (LOC51008), mRNA
							MR2-ST0203-130100-025-a09 ST0203 Homo sapiens cDNA
							w051e07.x1 NCI_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2547204 3' similar to SW:GG96_HUMAN
							Q08379 GOLGIN-95 ; contains element MER22 repetitive element ;

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2451	15018	27588	3	5.0E-62	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
2451	15018	27589	3	5.0E-62	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
2628	15188	27755	0.87	5.0E-62	U39487.1	NT	Human xanthine dehydrogenase/adhesin mRNA, complete cds
2628	15188	27756	0.87	5.0E-62	U39487.1	NT	Human xanthine dehydrogenase/adhesin mRNA, complete cds
3468	16073	28546	2.52	5.0E-62	4506758	NT	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
							zw78e08.s1 Soares_besla_NHT Homo sapiens cDNA clone IMAGE:782344 3' similar to SW:NRDC_RAT
4421	17006	29449	2.23	5.0E-62	AA431083.1	EST_HUMAN	P47245 NARDILYSIN;
4657	17239		0.95	5.0E-62	AW905887.1	EST_HUMAN	RCS-NN1088-100500-021-H03 NN1088 Homo sapiens cDNA
8485	21024	33941	0.64	5.0E-62	4506758	NT	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
9436	21862	34911	5.85	5.0E-62	AW410887.1	EST_HUMAN	fl07g08.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2061616 5'
11144	23652	36683	2.54	5.0E-62	11425574	NT	Homo sapiens muscle specific gene (M8), mRNA
11144	23652	36684	2.54	5.0E-62	11425574	NT	Homo sapiens muscle specific gene (M8), mRNA
873	13488	26003	4.05	4.0E-62	AW161478.1	EST_HUMAN	eu71d03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781701 5' similar to gb:M37104
873	13488	26004	4.05	4.0E-62	AW161478.1	EST_HUMAN	ATP SYNTHASE COUPLING FACTOR 8, MITOCHONDRIAL PRECURSOR (HUMAN);
874	13488	26003	3.94	4.0E-62	AW161478.1	EST_HUMAN	eu71d03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781701 5' similar to gb:M37104
874	13488	26004	3.94	4.0E-62	AW161478.1	EST_HUMAN	ATP SYNTHASE COUPLING FACTOR 8, MITOCHONDRIAL PRECURSOR (HUMAN);
1511	14103		1.01	4.0E-62	AA311281.1	EST_HUMAN	EST182043 Jurkat T-cells V Homo sapiens cDNA 5' end
2498	15002	27636	1.7	4.0E-62	A1827900.1	EST_HUMAN	gb:X57138_mai1 HISTONE H2B.2 (HUMAN);
2498	15002	27637	1.7	4.0E-62	A1827900.1	EST_HUMAN	wf12b08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2350359 3' similar to
3446	18054		7.95	4.0E-62	4557887	NT	gb:X57138_mai1 HISTONE H2B.2 (HUMAN);
8081	18698	31445	1.79	4.0E-62	4506878	NT	Homo sapiens keratin 18 (KRT18) mRNA
8439	19041	31829	2.58	4.0E-62	11420954	NT	Homo sapiens solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 2 (SLC13A2)
7223	19754	32809	1.86	4.0E-62	11421041	NT	mRNA
7650	20142	33021	2.5	4.0E-62	7657057	NT	Homo sapiens ubiquitin specific protease 9, X chromosome (Drosophila fat facets related) (USP9X), mRNA
7650	20142	33022	2.5	4.0E-62	7657057	NT	Homo sapiens phosphoribosyl pyrophosphate synthetase 2 (PRPS2), mRNA
8112	20653	33562	0.95	4.0E-62	11428973	NT	Homo sapiens eukaryotic translation initiation factor 2B, subunit 2 (beta, 39kD) (EIF2B2), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8760	21319	34243	5.44	4.0E-62	AB033089.1	NT	Homo sapiens mRNA for KIAA1283 protein, partial cds
10880	23411	38429	2.16	4.0E-62	Z78768.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC9pA16D3
10880	23411	38430	2.16	4.0E-62	Z78768.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC9pA16D3
11146	23654	36886	2.05	4.0E-62	AW023559.1	EST_HUMAN	df58g04.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2467751 5'
12003	24912		1.89	4.0E-62	11418192	NT	Homo sapiens non-histone chromosome protein 2 (S. cerevisiae)-like 1 (NHPL1), mRNA
12420	24806	30887	1.78	4.0E-62	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
12475	24600	30884	15	4.0E-62	11417882	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12475	24600	30885	15	4.0E-62	11417882	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12528	24642	30888	2.68	4.0E-62	11430400	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
78	12755	25238	0.85	3.0E-62	4557794	NT	Homo sapiens neurofibromin 2 (bilateral acoustic neuroma) (NF2) mRNA
3082	15097	28169	0.83	3.0E-62	AB040808.1	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
3082	15097	28170	0.83	3.0E-62	AB040808.1	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
3761	16382	28630	5.68	3.0E-62	X62858.1	NT	Human cyclophilin-related processed pseudogene
8477	21016	33932	3.98	3.0E-62	A1632733.1	EST_HUMAN	ves3f04.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2298003 3' similar to contains THR12
1274	13870	28390	2.31	2.0E-62	AL163284.2	NT	THF repetitive element
8709	21248	34170	4.31	2.0E-62	BF328911.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C084
8709	21248	34171	4.31	2.0E-62	BF328911.1	EST_HUMAN	RCO-BN0284-300500-031-e05 BN0284 Homo sapiens cDNA
10078	22571		3.84	2.0E-62	AF224689.1	NT	RCO-BN0284-300500-031-e05 BN0284 Homo sapiens cDNA
11537	23965		19.58	2.0E-62	BF330678.1	EST_HUMAN	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3
1082	13687	26189	1.74	1.0E-62	AF248540.1	NT	(UBE2D3) genes, complete cds
1592	14185	26717	9.15	1.0E-62	L78810.1	NT	QV4-BT0257-081199-017-e03 BT0257 Homo sapiens cDNA
1834	14422	28972	1.05	1.0E-62	AA825207.1	EST_HUMAN	Homo sapiens intersecin 2 (SH3D1B) mRNA, complete cds
2839	15555	28031	1.22	1.0E-62	AL030044.1	EST_HUMAN	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
4825	17208	28658	1.48	1.0E-62	8823201	NT	af70e11.1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1047404 5' similar to WP-K01H12.1
5305	17867	30280	0.74	1.0E-62	AA148822.1	EST_HUMAN	CE03453
7188	19720	32567	1.01	1.0E-62	AA490080.1	EST_HUMAN	DKFZp568F104_r1 588 (synonym: hfid2) Homo sapiens cDNA clone DKFZp568F104 5'
7189	19730	32581	3	1.0E-62	AA722878.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ20212 (FLJ20212), mRNA
7189	19730	32582	3	1.0E-62	AA722878.1	EST_HUMAN	z08008.1 Soares_pregnant uterus_NbHPU Homo sapiens cDNA clone IMAGE:491511 5' similar to
8682	21231	34151	0.71	1.0E-62	AA280050.1	EST_HUMAN	SW:CS81_BOVIN P10897 CYTOCHROME B561.1
8888	21526	34455	1.64	1.0E-62	7682289	NT	ab05c02.s1 Strategene fetal retina 837202 Homo sapiens cDNA clone IMAGE:838908 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8968	21528	34456	1.84	1.0E-62	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
9030	21567	34495	2.39	1.0E-62	X15533.1	NT	H. sapiens lysosomal acid phosphatase gene (EC 3.1.3.2) Exon 9
9030	21567	34496	2.39	1.0E-62	X15533.1	NT	H. sapiens lysosomal acid phosphatase gene (EC 3.1.3.2) Exon 9
9479	21675	34822	2.95	1.0E-62	AA465170.1	EST_HUMAN	aa33408.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815055 3'
11245	23775	36832	2.49	1.0E-62	Z78698.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SO6pA14D8
12269	24490		6.66	1.0E-62	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
12508	24630	30894	2.04	1.0E-62	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
360	13009	25492	1.88	9.0E-63	AW816405.1	EST_HUMAN	QV4-ST0234-181189-037-R05 S10234 Homo sapiens cDNA
2363	14652		2.15	9.0E-63	C18159.1	EST_HUMAN	C18159 Human placenta cDNA (TF-ujwara) Homo sapiens cDNA clone GEN-598C10 5'
4114	16708	29182	9.09	9.0E-63	AB002348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
4114	16708	29163	9.09	9.0E-63	AB002348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
5453	18022	37142	3.93	9.0E-63	11418185	NT	Homo sapiens acinase 2, mitochondrial (ACO2), mRNA
5657	18284	30782	1.55	9.0E-63	Y15056.1	NT	Homo sapiens mRNA for PKB kinase
7234	18764	32620	3.66	9.0E-63	11426985	NT	Homo sapiens nucleoporin 88kD (NUP88), mRNA
8268	20809	33729	1.12	9.0E-63	11421160	NT	Homo sapiens Ras association (RAGDS/AF-6) domain family 2 (RASSF2), mRNA
2382	14851	27524	1.5	8.0E-63	4557734	NT	Homo sapiens monoamine oxidase A (MAOA), nuclear gene encoding mitochondrial protein, mRNA
2412	14880	27555	2.47	8.0E-63	5031810	NT	Homo sapiens IL2-inducible T-cell kinase (ITK), mRNA
3508	16113	28590	4.62	8.0E-63	AF188349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
3508	16113	28591	4.62	8.0E-63	AF188349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
4352	16839	28381	3.64	8.0E-63	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C0068
664	13575		2.31	7.0E-63	AB72137.1	EST_HUMAN	wm55g11.x1 NCI_CGAP_U2 Homo sapiens cDNA clone IMAGE:2439808 3'
5542	18174		34.88	6.0E-63	AA420803.1	EST_HUMAN	nc63102.1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:746947 similar to gb:Y00361 60S
8807	21346	34270	0.5	5.0E-63	11528464	NT	RIBOSOMAL PROTEIN (HUMAN);
3363	15671	28449	0.81	4.0E-63	AL163278.2	NT	Homo sapiens G protein-coupled receptor 51 (GPR51), mRNA
3881	16479	28940	0.98	4.0E-63	AB014607.1	NT	Homo sapiens chromosome 21 segment HS21C078
3881	16479	28941	0.98	4.0E-63	AB014607.1	NT	Homo sapiens mRNA for KIAA0707 protein, partial cds
6573	19171	31868	5.46	4.0E-63	AW760372.1	EST_HUMAN	Homo sapiens mRNA for KIAA0707 protein, partial cds
6573	19171	31869	5.46	4.0E-63	AW760372.1	EST_HUMAN	CM3-BT0595-190100-072-c09 BT0595 Homo sapiens cDNA
11012	23528	36561	2.3	4.0E-63	AW134709.1	EST_HUMAN	CM3-BT0595-190100-072-c09 BT0595 Homo sapiens cDNA
11012	23528	36562	2.3	4.0E-63	AW134709.1	EST_HUMAN	UI-H-B11-ebq-a-02-Q-UJ.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2712482 3'
1979	14562	27121	1.75	3.0E-63	AB018260.1	NT	UI-H-B11-ebq-a-02-Q-UJ.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2712482 3'
2807	15359	27626	1.56	3.0E-63	J00310.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
							Human Met-RNA-1 gene 1

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2848	13877	28399	11.17	3.0E-63	6005863	NT	Homo sapiens zinc finger protein 144 (Maf-1b) (ZNF144), mRNA
6800	19197	32002	29.68	3.0E-63	11545810	NT	Homo sapiens hepatocellular carcinoma antigen gene 520 (LOC33828), mRNA
9822	22122	35088	0.77	3.0E-63	BE878158.1	EST_HUMAN	601485856F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3888263 5'
9822	22122	35087	0.77	3.0E-63	BE878158.1	EST_HUMAN	601485856F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3888263 5'
205	12866	25351	3.47	2.0E-63	U07804.1	NT	Human DNA topoisomerase I mRNA, partial cds
212	12873	25359	1.4	2.0E-63	4885228	NT	Homo sapiens eyes absent (Drosophila) homolog 2 (EYA2), mRNA
523	13155		5.21	2.0E-63	4557824	NT	Homo sapiens glutamate-cysteine ligase (gamma-glutamylcysteine synthetase), catalytic (72.8kD) (GLCLC) mRNA
859	13475	25988	8.8	2.0E-63	7857042	NT	Homo sapiens Down syndrome candidate region 1 (DSOR1), mRNA
1612	14205	26739	3.37	2.0E-63	AB030388.1	NT	Homo sapiens RHCE mRNA for Rh blood CE group antigen polypeptide, complete cds
1612	14205	26740	3.37	2.0E-63	AB030388.1	NT	Homo sapiens RHCE mRNA for Rh blood CE group antigen polypeptide, complete cds
1803	14393	26838	1.08	2.0E-63	BE410739.1	EST_HUMAN	601301627F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636103 5'
2128	14708	27277	1.33	2.0E-63	A1863861.1	EST_HUMAN	wf54b02.x1 NCI CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406803 3' similar to gb:M57609 GLI3 PROTEIN (HUMAN);
3182	15804	28277	1	2.0E-63	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resist-II, Alzheimer disease) (APP), mRNA
332A	15834	28411	1.7	2.0E-63	AF109718.1	NT	Homo sapiens chromosome 3 subtelomeric region
3978	16574	29044	2.09	2.0E-63	L39891.1	NT	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
4890	17584	30009	1.18	2.0E-63	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
5467	24742	30420	1.85	2.0E-63	11419428	NT	Homo sapiens similar to ecdonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC33214), mRNA
6045	18884	31404	2.51	2.0E-63	BF373541.1	EST_HUMAN	QV1-FT0170-040700-285-c05 FT0170 Homo sapiens cDNA
6045	18884	31405	2.51	2.0E-63	BF373541.1	EST_HUMAN	QV1-FT0170-040700-285-c05 FT0170 Homo sapiens cDNA
6333	18939	31715	1.04	2.0E-63	11421940	NT	Homo sapiens protein kinase, cAMP-dependent, regulatory, type II, beta (PRKAR2B), mRNA
6333	18939	31716	1.04	2.0E-63	11421940	NT	Homo sapiens protein kinase, cAMP-dependent, regulatory, type II, beta (PRKAR2B), mRNA
							Human germline T-cell receptor beta chain Dopamine-beta-hydroxylase-like, TRY1, TRY2, TRY3, TCRBV2/2S1P, TCRBV2/2S1A2N1T, TCRBV5S1A1T, TCRBV5S1A1T, TCRBV5S1A1T, TCRBV13S3, TCRBV6S7P, TCRBV7S3A2T, TCRBV13S2A1T, TCRBV6S2A2PT, TCRBV7S2A1N4T, TCRBV13S9/13S>
6803	18394	32210	1.62	2.0E-63	U88059.1	NT	Homo sapiens MIST mRNA, partial cds
6844	19434	32249	0.87	2.0E-63	AB032369.1	NT	Homo sapiens MIST mRNA, partial cds
6844	19434	32250	0.87	2.0E-63	AB032369.1	NT	Homo sapiens MIST mRNA, partial cds
7135	19474	32285	1.43	2.0E-63	9810365	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC58834), mRNA
7135	19474	32286	1.43	2.0E-63	9810365	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC58834), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7755	20263	33158	0.89	2.0E-63	AB048844.1	NT	Homo sapiens mRNA for KIAA1824 protein, partial cds
8470	21010	33927	2.91	2.0E-63	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
8884	21522	34449	1.12	2.0E-63	11420949	NT	Homo sapiens kinesin family member 3B (KIF3B), mRNA
8884	21522	34450	1.12	2.0E-63	11420949	NT	Homo sapiens kinesin family member 3B (KIF3B), mRNA
8852	22350	35331	0.9	2.0E-63	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
10825	23157	36170	22.7	2.0E-63	N78945.1	EST_HUMAN	zb18b05.s1 Soares_fetal_lung_Nhlh10W Homo sapiens cDNA clone IMAGE:302385 3' similar to gb:X17206 40S RIBOSOMAL PROTEIN S4 (HUMAN);
10652	23184	36198	2.83	2.0E-63	AF098810.1	NT	Homo sapiens neurodin III-alpha gene, partial cds
10652	23184	36198	2.83	2.0E-63	AF098810.1	NT	Homo sapiens neurodin III-alpha gene, partial cds
11886	24851	30702	6.92	2.0E-63	11418185	NT	Homo sapiens scotinase 2, mitochondrial (ACO2), mRNA
12823	24701	30864	1.4	2.0E-63	AB011339.1	NT	Homo sapiens gene for AF-6, complete cds
4434	17020	29460	3.52	1.0E-63	F08485.1	EST_HUMAN	HSC2VD111 normalized infant brain cDNA Homo sapiens cDNA clone c-zid11
4434	17020	29461	3.52	1.0E-63	F08485.1	EST_HUMAN	HSC2VD111 normalized infant brain cDNA Homo sapiens cDNA clone c-zid11
5555	18187	30602	1.32	1.0E-63	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region, segment 2/2
5943	18563	31293	1.38	1.0E-63	AW582268.1	EST_HUMAN	QV0-ST0215-060100-083-509 ST0215 Homo sapiens cDNA
8408	20948		2.21	1.0E-63	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
12581	24970		17.03	1.0E-63	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
6122	18737	31489	1.06	9.0E-64	AW401433.1	EST_HUMAN	U-HIF-BK0-est-b-09-Q-UJ17 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3053153 5'
7808	20351	33256	4.35	9.0E-64	AI478186.1	EST_HUMAN	7m50607.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2161525 3'
1084	13689		13.09	8.0E-64	BE280786.1	EST_HUMAN	601155232F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139038 5'
6289	18897	31698	3.17	8.0E-64	BE865755.1	EST_HUMAN	601808808F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3910336 5'
11694	24109		1.48	8.0E-64	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
11752	24148		3.56	8.0E-64	T60651.1	EST_HUMAN	y88802.11 Stragene lung (8837210) Homo sapiens cDNA clone IMAGE:79179 5'
3582	16186		0.84	7.0E-64	BE394321.1	EST_HUMAN	601311455F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3633204 5'
4838	17418	28688	2.85	7.0E-64	4507490	NT	Homo sapiens thimet oligopeptidase 1 (THOP1) mRNA
4838	17418	28689	2.85	7.0E-64	4507490	NT	Homo sapiens thimet oligopeptidase 1 (THOP1) mRNA
7786	20274	33172	0.68	7.0E-64	4506788	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1) mRNA
9846	22441	35418	4.54	7.0E-64	Y07848.1	NT	Homo sapiens EWS, gar22, mp22 and bcr22 genes
1760	14350	26894	2.4	8.0E-64	A1651892.1	EST_HUMAN	w651e07.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2308220 3' similar to gb:M15182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
1760	14350	26895	2.4	8.0E-64	A1651892.1	EST_HUMAN	w651e07.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2308220 3' similar to gb:M15182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
3156	15770	28236	4.46	8.0E-64	AW028445.1	EST_HUMAN	wv13e03.x1 NCI_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2529436 3'
3156	15770	28237	4.46	8.0E-64	AW028445.1	EST_HUMAN	wv13e03.x1 NCI_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2529436 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5805	18430	31149	3.71	6.0E-64	Y18833.1	NT	Homo sapiens MCP-1 gene and enhancer region
5805	18430	31150	3.71	6.0E-64	Y18833.1	NT	Homo sapiens MCP-1 gene and enhancer region
5823	18447	31169	5.6	6.0E-64	M13975.1	NT	Homo sapiens protein kinase C beta-II type (PRKCB1) mRNA, complete cds
7288	18814	32870	2.45	6.0E-64	11525879	NT	Homo sapiens mesenchyme homeo box 1 (MEOX1), mRNA
7288	18814	32871	2.45	6.0E-64	11525879	NT	Homo sapiens mesenchyme homeo box 1 (MEOX1), mRNA
9250	21776	34727	8.24	6.0E-64	11420555	NT	Homo sapiens acetyl-CoA synthetase (LOC55902), mRNA
9425	21934	34883	2	6.0E-64	AF274753.1	NT	Homo sapiens progressive ankylosis-like protein (ANK) mRNA, complete cds
9834	22134	35089	2.23	6.0E-64	S76475.1	NT	trkC [human, brain, mRNA, 2715 nt]
10949	23181	36184	7.87	6.0E-64	11420197	NT	Homo sapiens stromal antigen 3 (STAG3), mRNA
10949	23181	36185	7.87	6.0E-64	11420197	NT	Homo sapiens stromal antigen 3 (STAG3), mRNA
10898	15770	28236	1.64	6.0E-64	AW028445.1	EST_HUMAN	wf13a03.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2529436 3'
10898	15770	28237	1.64	6.0E-64	AW028445.1	EST_HUMAN	wf13a03.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2529436 3'
11803	24242	31008	2.45	6.0E-64	11526198	NT	Homo sapiens interleukin 10 receptor, beta (IL10RB), mRNA
853	13489	25979	3.09	5.0E-64	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
853	13489	25980	3.09	5.0E-64	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
1383	13977	26504	0.95	5.0E-64	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
1467	14059	26593	2.55	5.0E-64	L40833.1	NT	Homo sapiens phosphoglucosyltransferase-related protein (PGMFRP) gene, complete cds
1467	14059	26594	2.55	5.0E-64	L40833.1	NT	Homo sapiens phosphoglucosyltransferase-related protein (PGMFRP) gene, complete cds
1749	14339	26888	1.52	5.0E-64	U89358.1	NT	Human K3mb1 protein homolog mRNA, complete cds
2853	14120	26857	3.5	5.0E-64	7682205	NT	Homo sapiens KIAA0618 gene product (KIAA0618), mRNA
2853	14120	26858	3.5	5.0E-64	7682205	NT	Homo sapiens KIAA0618 gene product (KIAA0618), mRNA
4032	16630	28089	7.79	5.0E-64	AF017433.1	NT	Homo sapiens putative transcription factor CR53 (CR53) mRNA, partial cds
4181	16771	28220	0.88	5.0E-64	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
10682	23222	36235	3.91	4.0E-64	AW813783.1	EST_HUMAN	RC3-ST0197-120200-015-a03 ST0197 Homo sapiens cDNA
10682	23222	36236	3.91	4.0E-64	AW813783.1	EST_HUMAN	RC3-ST0197-120200-015-a03 ST0197 Homo sapiens cDNA
2239	14814	27388	3.14	3.0E-64	C18895.1	EST_HUMAN	C18895 Human placenta cDNA (TFujisawa) Homo sapiens cDNA clone GEN:588502 5'
3283	16904	28384	0.76	3.0E-64	BE794381.1	EST_HUMAN	60158955F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943577 5'
3491	16086	28570	2.57	3.0E-64	AV711714.1	EST_HUMAN	AV711714 DCA Homo sapiens cDNA clone DCAAMC01 5'
3491	16086	28571	2.57	3.0E-64	AV711714.1	EST_HUMAN	AV711714 DCA Homo sapiens cDNA clone DCAAMC01 5'
6232	18841	31613	1.53	3.0E-64	Z86273.1	NT	H. sapiens isoform 1 gene for L-type calcium channel, exon 28
6819	18216	32021	3.11	3.0E-64	BF370000.1	EST_HUMAN	RC8-FN0019-280600-011-G11 FN0019 Homo sapiens cDNA
8402	20942	33864	1.83	3.0E-64	AF248953.1	NT	Homo sapiens golgi matrix protein GM130 (GOLGA2) mRNA, complete cds
8402	20942	33865	1.83	3.0E-64	AF248953.1	NT	Homo sapiens golgi matrix protein GM130 (GOLGA2) mRNA, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8432	20972	33885	4.49	3.0E-04	BE206521.1	EST_HUMAN	b672h12.y1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3047975 5' similar to gb.L08069 DNAJ
8432	20972	33886	4.49	3.0E-04	BE206521.1	EST_HUMAN	PROTEIN HOMOLOG 2 (HUMAN);
8348	21862	34810	1.23	3.0E-04	AL163246.2	NT	b672h12.y1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3047975 5' similar to gb.L08069 DNAJ
8348	21862	34811	1.23	3.0E-04	AL163246.2	NT	PROTEIN HOMOLOG 2 (HUMAN);
8433	21859	34907	0.72	3.0E-04	AL163246.2	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
8433	21859	34908	0.72	3.0E-04	AW977384.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
11118	23627	36669	1.83	3.0E-04	AL163246.2	NT	EST389483 IMAGE resequences, MAGO Homo sapiens cDNA
11118	23627	36670	1.83	3.0E-04	AL163246.2	NT	EST389483 IMAGE resequences, MAGO Homo sapiens cDNA
11539	23687	37058	4.89	3.0E-04	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1127	13730	26241	1.28	2.0E-04	AA608940.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
1441	14034	26562	8.3	2.0E-04	4757701	NT	Homo sapiens chromosome 21 segment HS21C027
							af09d08.s1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1031151 3'
							Homo sapiens eIF4E-like cap-binding protein (4EHP) mRNA
2568	15130		1.88	2.0E-04	A1827030.1	EST_HUMAN	w087b01.x1 NCI_CGAP_K111 Homo sapiens cDNA clone IMAGE:2462281 3' similar to contains element
2570	15133	27702	1.25	2.0E-04	AL163246.2	NT	L1 repetitive element;
2570	15133	27703	1.25	2.0E-04	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
							Homo sapiens glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2) (GOT2), nuclear gene encoding mitochondrial protein, mRNA
3174	15787	28259	1.17	2.0E-04	4504068	NT	EST370215 IMAGE resequences, MAGO Homo sapiens cDNA
3855	18453	28916	0.83	2.0E-04	AW958145.1	EST_HUMAN	EST370215 IMAGE resequences, MAGO Homo sapiens cDNA
3855	18453	28917	0.83	2.0E-04	AW958145.1	EST_HUMAN	EST370215 IMAGE resequences, MAGO Homo sapiens cDNA
6157	18770	31534	2.28	2.0E-04	AL124387.1	EST_HUMAN	AL124387 NT2RM2 Homo sapiens cDNA clone NT2RM2002113 5'
6389	18892	31772	1.52	2.0E-04	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG4) mRNA, partial cds
6811	19208	32016	4.45	2.0E-04	BF688537.1	EST_HUMAN	602123474F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4280395 5'
6708	18301	32105	1.38	2.0E-04	AI078397.1	EST_HUMAN	cc28003.x1 Soares total_fetus_Nb2Hf8_9w Homo sapiens cDNA clone IMAGE:1676717 3'
6802	19393	32209	53.03	2.0E-04	MT7185.1	NT	H.sapiens dopamine receptor D5 pseudogene 1, partial cds
8603	21142	34055	1.98	2.0E-04	11434008	NT	Homo sapiens lymphocyte cytosolic protein 1 (L-plastin) (LCP-1), mRNA
8603	21142	34056	1.98	2.0E-04	11434008	NT	Homo sapiens lymphocyte cytosolic protein 1 (L-plastin) (LCP-1), mRNA
9157	21882	34638	1.14	2.0E-04	AL132570.1	EST_HUMAN	AL132570 NT2RP4 Homo sapiens cDNA clone NT2RP4000108 5'
9888	22386	35384	0.48	2.0E-04	T06397.1	EST_HUMAN	EST042886 Fetal brain, Stratagene (cat#838206) Homo sapiens cDNA clone HFBDS88
9889	22386	35385	0.48	2.0E-04	T06397.1	EST_HUMAN	EST042886 Fetal brain, Stratagene (cat#838206) Homo sapiens cDNA clone HFBDS88
10643	23175	36187	2.38	2.0E-04	BF528114.1	EST_HUMAN	602042882F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4180556 5'
10829	23447	36468	5.36	2.0E-04	A1822911.1	EST_HUMAN	w081b06.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2452211 3'
10829	23447	36469	5.36	2.0E-04	A1822911.1	EST_HUMAN	w081b06.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2452211 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11112	23022	36863	1.78	2.0E-04	AW884773.1	EST_HUMAN	PM2-SN0018-Z20300-002-e12 SN0018 Homo sapiens cDNA
11828	24104	31034	1.5	2.0E-04	6507387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
12285	24487		2.44	2.0E-04	H55162.1	EST_HUMAN	CHR220101 Chromosome 22 exon Homo sapiens cDNA clone C22_132 5'
279	12836	25421	1.84	1.0E-04	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
1815	14405	28949	9.83	1.0E-04	AB284119.1	EST_HUMAN	af00c01.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2519136 3' similar to
3045	15861	28142	0.82	1.0E-04	4507334	NT	gb:L21688_cds1 PROTHYMOSIN ALPHA (HUMAN); contains element MSR1 repetitive element;
							Homo sapiens synaptophysin 1 (SYNJ1), mRNA
							Homo sapiens transcription factor (GHM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synaptophysin genes, complete cds; and L-type calcium channel α)
3561	18165	28648	5.94	1.0E-04	AF198779.1	NT	Homo sapiens TRIAD3 mRNA, partial cds
3644	18247	28722	1.14	1.0E-04	AF228527.1	NT	Homo sapiens TRIAD3 mRNA, partial cds
3644	18247	28723	1.14	1.0E-04	AF228527.1	NT	Homo sapiens TRIAD3 mRNA, partial cds
3668	18568	29035	0.67	1.0E-04	8822829	NT	Homo sapiens hypothetical protein FLJ11028 (FLJ11028), mRNA
8978	22471	35454	0.84	1.0E-04	AA042976.1	EST_HUMAN	z653108.s1 Soares_pregnant uterus_NIHPU Homo sapiens cDNA clone IMAGE:486567 3'
11798	24178		1.37	1.0E-04	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2315	14887	27462	1.02	9.0E-05	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
2315	14887	27463	1.02	9.0E-05	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
11410	23861		35.61	9.0E-05	BF330676.1	EST_HUMAN	QV4-BT0257-081169-017-e03 BT0257 Homo sapiens cDNA
11383	23835	36897	14.63	8.0E-05	AI928244.1	EST_HUMAN	au58h07.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2519005 3' similar to
10059	22554	35550	2.08	7.0E-05	BE081653.1	EST_HUMAN	SW:RL21_HUMAN P46778 60S RIBOSOMAL PROTEIN L21;
1094	13639	26209	1.68	8.0E-05	AV721898.1	EST_HUMAN	QV2-BT0635-240400-162-c02 BT0635 Homo sapiens cDNA
							AV721898 HTB Homo sapiens cDNA clone HTBZC08 5'
1988	14550		5.21	8.0E-05	AA550628.1	EST_HUMAN	rb06410.s1 NCI_CGAP_P111 Homo sapiens cDNA clone IMAGE:988379 similar to gb:K03002 60S RIBOSOMAL PROTEIN L32 (HUMAN);
							xb07608.x1 NCI_CGAP_Co21 Homo sapiens cDNA clone IMAGE:2583545 3' similar to TR:Q63308 Q63308
8881	21220	34140	2.24	6.0E-05	AW083252.1	EST_HUMAN	LONG INTERSPERSED REPETITIVE DNA CONTAINING 7 ORFS; contains L1.b2 L1 repetitive element;
8941	21479	34400	4.18	6.0E-05	AA427878.1	EST_HUMAN	zw53b06.s1 Soares_fetal_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773747 3'
8941	21479	34401	4.18	6.0E-05	AA427878.1	EST_HUMAN	zw53b06.s1 Soares_fetal_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773747 3'
8004	21541	34471	1.04	6.0E-05	AI085314.1	EST_HUMAN	qf18h05.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:1750425 3'
8004	21541	34472	1.04	6.0E-05	AI085314.1	EST_HUMAN	qf18h05.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:1750425 3'
10752	23276	36288	12.35	6.0E-05	BE587816.1	EST_HUMAN	601340485F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:1750425 3'
11135	23643	36863	1.73	6.0E-05	AW206752.1	EST_HUMAN	UI-H-B1-efg-q-10-01.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:3682877 5'
11369	23821	36863	4.4	6.0E-05	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010

Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
659	13282	25782	0.75	5.0E-05	AF084604.1	NT	Homo sapiens KE03 protein mRNA, partial cds
1397	13891	26518	1.8	5.0E-05	7681951	NT	Homo sapiens KIAA0156 gene product (KIAA0156), mRNA
1397	13891	26519	1.8	5.0E-05	7681951	NT	Homo sapiens KIAA0156 gene product (KIAA0156), mRNA
2200	14776	27349	0.87	5.0E-05	AB033788.1	NT	Homo sapiens hPAD-colony10 mRNA for peptidylarginine deiminase type I, complete cds
3294	15005	28385	2.39	5.0E-05	4507948	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
3294	15005	28386	2.39	5.0E-05	4507948	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
10384	22858	35850	0.99	5.0E-05	AF008688.1	NT	Multiple sclerosis associated retrovirus polyprotein (pol) mRNA, partial cds
207	12868	25354	2.15	4.0E-05	AL120419.1	EST_HUMAN	DKFZp761G108_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761G108 5'
775	13304	25894	1.3	4.0E-05	AI286468.1	EST_HUMAN	qm46a01.x1 Soares_placenta_8to8weeks_2Nblp8to8W Homo sapiens cDNA clone IMAGE:1891800 3'
775	13394	25895	1.3	4.0E-05	AI286468.1	EST_HUMAN	qm46a01.x1 Soares_placenta_8to8weeks_2Nblp8to8W Homo sapiens cDNA clone IMAGE:1891800 3'
1117	13720	26232	1.52	4.0E-05	4826735	NT	Homo sapiens fragile X mental retardation, autosomal homolog 1 (FMR1), mRNA
1533	14126	26882	17.23	4.0E-05	4506836	NT	Homo sapiens ribosomal protein L34 (RPL34) mRNA
2374	14944	27516	1.14	4.0E-05	BE221489.1	EST_HUMAN	huz25a04.x1 NCI_CGAP_Mel15 Homo sapiens cDNA clone IMAGE:3171102 3'
2374	14944	27517	1.14	4.0E-05	BE221489.1	EST_HUMAN	huz25a04.x1 NCI_CGAP_Mel15 Homo sapiens cDNA clone IMAGE:3171102 3'
6303	18910	31682	4.44	4.0E-05	AB033083.1	NT	Homo sapiens mRNA for KIAA1287 protein, partial cds
6303	18910	31683	4.44	4.0E-05	AB033083.1	NT	Homo sapiens mRNA for KIAA1287 protein, partial cds
7171	19703	32550	0.85	4.0E-05	M19879.1	NT	Human clabridin 27 gene, exons 10 and 11, and L1 and Alu repeats
7271	19799	32656	2.39	4.0E-05	11545780	NT	Homo sapiens hypodermal protein FLJ22087 (FLJ22087), mRNA
7783	20328	33230	0.81	4.0E-05	5453765	NT	Homo sapiens nrl (chicken)-like 2 (NELL2), mRNA
7783	20328	33231	0.81	4.0E-05	5453765	NT	Homo sapiens nrl (chicken)-like 2 (NELL2), mRNA
9072	21609	34539	0.8	4.0E-05	11429127	NT	Homo sapiens Janus kinase 2 (a protein tyrosine kinase) (JAK2), mRNA
10473	22897		2.55	4.0E-05	AJ277546.2	NT	Homo sapiens WEE1 gene for protein kinase and partial ZNF143 gene for zinc finger transcription factor
10833	23354	36368	1.93	4.0E-05	AV738704.1	EST_HUMAN	AV738784 CB Homo sapiens cDNA clone CBCCBE05 5'
10877	23492	36622	3.39	4.0E-05	AF119848.1	NT	Homo sapiens PRO1474 mRNA, complete cds
12124	13720	26232	1.41	4.0E-05	4826735	NT	Homo sapiens fragile X mental retardation, autosomal homolog 1 (FMR1), mRNA
101	12778	25261	2.51	3.0E-05	5031976	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
102	12778	25261	2.35	3.0E-05	5031976	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
1275	15393		11.57	3.0E-05	X78632.1	NT	H. sapiens HZF9 mRNA for zinc finger protein
1805	14197	26729	0.98	3.0E-05	4504628	NT	Homo sapiens immunoglobulin superfamily, member 3 (IGSF3) mRNA, and translated products
1881	14449	27007	1	3.0E-05	AI000892.1	EST_HUMAN	ov23103.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1638173 3' similar to contains element MSR1 repetitive element:

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3019	15635	28111	0.8	3.0E-65	D87078.2	NT	Homo sapiens mRNA for KIAA0235 protein, partial cds
3315	15625	28403	0.96	3.0E-65	4504650	NT	Homo sapiens laminin, beta 1 (LAMB1), mRNA
3784	16394	28949	1.19	3.0E-65	A100662.1	EST_HUMAN	α2303.81 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1638173 3' similar to contains element MSR1 repetitive element:
4754	17335	29779	1.36	3.0E-65	6912385	NT	Homo sapiens rab6 GTPase activating protein (GAP and centrosome-associated) (GAPCENA), mRNA
6981	22478	35458	1.44	3.0E-65	BE787398.1	EST_HUMAN	601479388F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3882405 5'
11287	23005	36013	13.23	3.0E-65	AA430006.1	EST_HUMAN	zw65a08.L1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:781042 5'
3451	16038	28334	5.71	2.0E-65	BF680284.1	EST_HUMAN	602155082F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4295866 5'
6957	19253		5.63	2.0E-65	BE263373.1	EST_HUMAN	601160863F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3534741 5'
7186	19718	32565	25.57	2.0E-65	BF576922.1	EST_HUMAN	602134358F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4289295 5'
8778	21318	34241	1.21	2.0E-65	AK024463.1	NT	Homo sapiens mRNA for FLJ00056 protein, partial cds
8779	21318	34242	1.21	2.0E-65	AK024463.1	NT	Homo sapiens mRNA for FLJ00056 protein, partial cds
11750	24147		6.58	2.0E-65	AA307804.1	EST_HUMAN	EST178755 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end similar to endogenous retrovirus
12241	24832		2.26	2.0E-65	BF246086.1	EST_HUMAN	601854033F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4073769 5'
94	12770		0.78	1.0E-65	BF125544.1	EST_HUMAN	601763488F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4026501 5'
584	13195	25874	1.4	1.0E-65	7657495	NT	Homo sapiens putative Rab5 GDP/GTP exchange factor homologue (RABEX5), mRNA
2084	14665	27236	0.95	1.0E-65	AB040946.1	NT	Homo sapiens mRNA for KIAA1513 protein, partial cds
3419	16027	28508	0.94	1.0E-65	BE468681.1	EST_HUMAN	h24a09.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:3208888 3'
4070	16668	29127	1.85	1.0E-65	4504082	NT	Homo sapiens glycocalyx 4 (GPC4) mRNA
4070	16668	29128	1.85	1.0E-65	4504082	NT	Homo sapiens glycocalyx 4 (GPC4) mRNA
4285	16871	29317	2.39	1.0E-65	AW028340.1	EST_HUMAN	w08a09.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2543152 3'
4285	16871	29318	2.39	1.0E-65	AW028340.1	EST_HUMAN	w08a09.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2543152 3'
5688	18295	30775	0.74	1.0E-65	A1243738.1	EST_HUMAN	q08a07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1854108 3' similar to TR-007823 Q07823 MAC30 PROTEIN;
8186	20737	33648	4.11	1.0E-65	AW820481.1	EST_HUMAN	QV2-ST0288-140200-042-f12 ST0288 Homo sapiens cDNA
8186	20737	33649	4.11	1.0E-65	AW820481.1	EST_HUMAN	QV2-ST0288-140200-042-f12 ST0288 Homo sapiens cDNA
8222	20763	33679	0.58	1.0E-65	BE732118.1	EST_HUMAN	601568124F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3841012 5'
8222	20763	33680	0.56	1.0E-65	BE732118.1	EST_HUMAN	601568124F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3841012 5'
8261	20802	33718	2.05	1.0E-65	AU141285.1	EST_HUMAN	AU141285 THYROT1 Homo sapiens cDNA clone THYRO1000358 5'
8261	20802	33720	2.05	1.0E-65	AU141285.1	EST_HUMAN	AU141285 THYROT1 Homo sapiens cDNA clone THYRO1000358 5'
8774	21313	34235	2.42	1.0E-65	BF688707.1	EST_HUMAN	602126239F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4283313 5'
8950	21488	34410	2.86	1.0E-65	AU128040.1	EST_HUMAN	AU128040 NT2RP2 Homo sapiens cDNA clone NT2RP2004714 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8050	21488	34411	2.88	1.0E-05	AU129040.1	EST_HUMAN	AU129040 NT2RP2 Homo sapiens cDNA clone NT2RP2004714 5'
8061	21489		2.54	1.0E-05	11431984	NT	Homo sapiens Inositol 1,4,5-trisphosphate receptor, type 1 (ITPR1), mRNA
9398	21821	34770	5.09	1.0E-05	AI0191746.1	EST_HUMAN	q458a02.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1793450 3' similar to gb:U28581 ZINC
9800	22298	35283	1.39	1.0E-05	AU153783.1	EST_HUMAN	FINGER PROTEIN 8 (HUMAN); contains MER19.11 MER19 repetitive element;
10203	22698	34692	0.65	1.0E-05	AA069559.1	EST_HUMAN	AU153783 NT2RP3 Homo sapiens cDNA clone NT2RP3004016 3'
10463	22957	34968	1.12	1.0E-05	AB037832.1	NT	275sa04.r1 Soares_pituitary_gland_N3HPG Homo sapiens cDNA clone IMAGE:382734 5'
10529	23068	36078	3.58	1.0E-05	M26167.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
10656	23188	36204	22.3	1.0E-05	45068680	NT	Human platelet factor 4 variant 1 (PF4var1) gene, complete cds
11010	23524	36558	2.70	1.0E-05	BF698707.1	EST_HUMAN	Homo sapiens ribosomal protein L7a (RPL7A) mRNA
11088	23600	36638	2.25	1.0E-05	AB21017.1	EST_HUMAN	602128238F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4283313 5'
11769	24179		2.28	1.0E-05	11418041	NT	1s78a09.x1 NC1_CGAP_G08 Homo sapiens cDNA clone IMAGE:2237170 3' similar to gb:U15533_rna1
11896	24238	31005	5.17	1.0E-05	11418322	NT	PANCREATITIS ASSOCIATED PROTEIN 1 PRECURSOR (HUMAN);
75	12753	25232	4.57	9.0E-06	AL160311.1	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
75	12753	25233	4.57	9.0E-06	AL160311.1	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
1398	13992	28520	1.54	9.0E-06	5031980	NT	Novel human gene mapping to chromosome 22
1398	13992	28521	1.54	9.0E-06	5031980	NT	Novel human gene mapping to chromosome 22
1531	14123		4.45	9.0E-06	M87298.1	NT	Homo sapiens 26S proteasome-associated ped1 homolog (POH1) mRNA
4802	17380	28630	0.57	9.0E-06	AL137163.1	NT	Homo sapiens 26S proteasome-associated ped1 homolog (POH1) mRNA
4801	17379	28629	0.66	8.0E-06	AA424304.1	EST_HUMAN	Human transposon-like element, partial
11225	23756		1.78	7.0E-06	BE084410.1	EST_HUMAN	Novel human gene mapping to chromosome X
4455	17041	29483	1.11	6.0E-06	AB24653.1	EST_HUMAN	z60c05.r1 Soares_NH-MRU_S1 Homo sapiens cDNA clone IMAGE:767048 5'
4455	17041	29484	1.11	6.0E-06	AB24653.1	EST_HUMAN	RC4-BT0311-141189-011-H08-BT0311 Homo sapiens cDNA
4455	17041	29485	1.11	6.0E-06	AB24653.1	EST_HUMAN	wn57h07.x1 NC1_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2449597 3' similar to WP:F15G9.4A
8373	20913		0.48	6.0E-06	BE178553.1	EST_HUMAN	CE18595;
11038	23552	36587	7.01	6.0E-06	X99181.1	NT	wn57h07.x1 NC1_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2449597 3' similar to WP:F15G9.4A
1411	14004	28532	1.25	5.0E-06	BE064410.1	EST_HUMAN	CE18595;
5278	17940	30286	0.57	5.0E-06	BE989544.1	EST_HUMAN	PM2-HT0604-030300-001-b08 HT0604 Homo sapiens cDNA
5278	17940	30287	0.57	5.0E-06	BE989544.1	EST_HUMAN	H.sapiens mRNA for ribosomal protein L31
9218	21735	34677	14.1	5.0E-06	11420557	NT	RC4-BT0311-141189-011-H08-BT0311 Homo sapiens cDNA
							601681582F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3951791 5'
							601681582F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3951791 5'
							Homo sapiens thyroid hormone receptor binding protein (AIB3), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
823	13440	25947	1.13	4.0E-66	6678816	NT	Mus musculus fragile X mental retardation syndrome 1 homolog (Fmr1), mRNA
1771	14361	26906	0.87	4.0E-66	AW897798.1	EST_HUMAN	RC1-NN0063-100500-022-602 NN0063 Homo sapiens cDNA
2319	14891	27468	1.64	4.0E-66	X68211.1	NT	H.sapiens DNA for endogenous retroviral like element
2513	15077		2.35	4.0E-66	AJ223364.1	NT	Homo sapiens germ-line DNA upstream of Jkappa locus
4898	17473		6.78	4.0E-66	9635487	NT	Human endogenous retrovirus, complete genome
5739	18365	31072	3.33	4.0E-66	11428843	NT	Homo sapiens methylene tetrahydrofolate dehydrogenase (NAD+ dependent), methenyltetrahydrofolate cyclohydrolase (MTHFD2), mRNA
5918	18540	31268	0.9	4.0E-66	AW939119.1	EST_HUMAN	QV1-DT0069-110200-067-g10 DT0069 Homo sapiens cDNA
6940	18048	30470	4.62	4.0E-66	AW965473.1	EST_HUMAN	EST377546 MAGE resequences, MAGE Homo sapiens cDNA
7185	19717	32564	7.41	4.0E-66	U78168.1	NT	Homo sapiens cAMP-regulated guanine nucleotide exchange factor 1 (cAMP-GEF) mRNA, complete cds
7625	18365	31072	1.05	4.0E-66	11428843	NT	Homo sapiens methylene tetrahydrofolate dehydrogenase (NAD+ dependent), methenyltetrahydrofolate cyclohydrolase (MTHFD2), mRNA
8022	20594	33466	6.44	4.0E-66	11421638	NT	Homo sapiens hypothetical protein FLJ20116 (FLJ20116), mRNA
8078	20818	33532	0.96	4.0E-66	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
1473	14065	26801	11.5	3.0E-66	4502068	NT	Homo sapiens solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
1473	14065	26802	11.5	3.0E-66	4502068	NT	Homo sapiens solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
2026	14608	27173	1	3.0E-66	N55323.1	EST_HUMAN	yz27g12.1 Scores multiple sclerosis 2Nbh-HMSP Homo sapiens cDNA clone IMAGE:284328 5' similar to SW:H2B1_TIGCA P35068 HISTONE H2B.1H2B.2 [2] PIR:B56612;
2026	14608	27174	1	3.0E-66	N55323.1	EST_HUMAN	yz27g12.1 Scores multiple sclerosis 2Nbh-HMSP Homo sapiens cDNA clone IMAGE:284328 5' similar to SW:H2B1_TIGCA P35068 HISTONE H2B.1H2B.2 [2] PIR:B56612;
2026	14608	27175	1	3.0E-66	N55323.1	EST_HUMAN	yz27g12.1 Scores multiple sclerosis 2Nbh-HMSP Homo sapiens cDNA clone IMAGE:284328 5' similar to SW:H2B1_TIGCA P35068 HISTONE H2B.1H2B.2 [2] PIR:B56612;
2732	15287	27854	3.43	3.0E-66	11141880	NT	Homo sapiens TGF(beta)-induced transcription factor 2 (TGIF2), mRNA
3151	15765	28232	6.89	3.0E-66	7662223	NT	Homo sapiens KIAA0849 gene product (KIAA0849), mRNA
5958	18285	30763	0.9	3.0E-66	AB020698.1	NT	Homo sapiens mRNA for KIAA0892 protein, partial cds
5946	18568	31266	2.07	3.0E-66	11417946	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
5946	18568	31267	2.07	3.0E-66	11417946	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
9444	21970	34978	0.59	3.0E-66	AK024453.1	NT	Homo sapiens mRNA for FLJ00045 protein, partial cds
9635	22135	35100	0.89	3.0E-66	11417118	NT	Homo sapiens KIAA0453 protein (KIAA0453), mRNA
9895	22480	35464	0.8	3.0E-66	7019480	NT	Homo sapiens protocadherin beta 1 (PCDH-beta1), mRNA
10415	22903	35908	0.92	3.0E-66	AF156859.1	NT	Homo sapiens myohydrum cofactor biosynthesis protein E (MCBPE) mRNA, complete cds

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Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11384	23836	36888	9.34	3.0E-68	5453948	NT	Homo sapiens protein phosphatase 2, regulatory subunit B (B56), alpha isoform (PPP2R5A) mRNA
56	12735	25203	1.34	2.0E-68	7657334	NT	Homo sapiens Mitochondrial NIK-related kinase (MINK), mRNA
55	12735	25204	1.34	2.0E-68	7657334	NT	Homo sapiens Mitochondrial NIK-related kinase (MINK), mRNA
447	12876	25132	1.21	2.0E-68	4505524	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORC5L) mRNA, and translated products
447	12876	25133	1.21	2.0E-68	4505524	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORC5L) mRNA, and translated products
1868	14452	27011	1.73	2.0E-68	AL163301.2	NT	Homo sapiens chromosome 21 segment HS21C101
3002	15818	28098	1.65	2.0E-68	X65859.1	NT	H. sapiens pseudogene for the low affinity IL-3 receptor
3572	16176	28658	0.97	2.0E-68	8823280	NT	Homo sapiens hypothetical protein FLJ20308 (FLJ20308), mRNA
3828	16428	28888	0.72	2.0E-68	AL117233.1	NT	Novel human gene mapping to chromosome 1
4139	16731	29184	0.57	2.0E-68	AF106389.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCa3 (NCX1) mRNA, complete cds
4760	17341	29788	16.35	2.0E-68	AJ133287.2	NT	Homo sapiens HLA-B gene for human leukocyte antigen B
4760	17341	29789	16.35	2.0E-68	AJ133287.2	NT	Homo sapiens HLA-B gene for human leukocyte antigen B
5862	18602	31336	0.8	2.0E-68	AW88854.1	EST_HUMAN	EST1380930 IMAGE sequences, MAGJ Homo sapiens cDNA
5862	18602	31337	0.8	2.0E-68	AW88854.1	EST_HUMAN	EST1380930 IMAGE sequences, MAGJ Homo sapiens cDNA
8781	21320	34244	2.24	2.0E-68	N45480.1	EST_HUMAN	yy58c02.r1 Soares_multiple_sclerosis_2N1H1MSP Homo sapiens cDNA clone IMAGE:277828 5'
12132	26057		1.8	2.0E-68	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
2819	15538	28010	1.85	1.0E-68	AV171817.1	EST_HUMAN	AV171817 DCB Homo sapiens cDNA clone DCBADC07 5'
2819	15538	28011	1.85	1.0E-68	AV171817.1	EST_HUMAN	AV171817 DCB Homo sapiens cDNA clone DCBADC07 5'
4474	15538	28010	3.57	1.0E-68	AV171817.1	EST_HUMAN	AV171817 DCB Homo sapiens cDNA clone DCBADC07 5'
4474	15538	28011	3.57	1.0E-68	AV171817.1	EST_HUMAN	AV171817 DCB Homo sapiens cDNA clone DCBADC07 5'
5583	18214	30863	5.49	1.0E-68	BF673088.1	EST_HUMAN	602152886F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4294151 5'
5862	18574	31307	0.68	1.0E-68	BE765232.1	EST_HUMAN	IL2-NT0101-280700-118-ED4 NT0101 Homo sapiens cDNA
5862	18574	31308	0.68	1.0E-68	BE765232.1	EST_HUMAN	IL2-NT0101-280700-118-ED4 NT0101 Homo sapiens cDNA
7018	18516	32338	0.95	1.0E-68	BF328623.1	EST_HUMAN	RC5-BN0183-010800-034-G06 BN0183 Homo sapiens cDNA
8395	20835	33857	1.6	1.0E-68	AA68858.1	EST_HUMAN	ss80c04.st NC1_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:827282 3'
9347	21861	34809	0.74	1.0E-68	AA018828.1	EST_HUMAN	2a57e12.r1 Soares retina N2b4-HR Homo sapiens cDNA clone IMAGE:363118 5'
10273	22768	35756	0.75	1.0E-68	AV748749.1	EST_HUMAN	AV748749 NPC Homo sapiens cDNA clone NPCBVA05 5'
10273	22768	35757	0.75	1.0E-68	AV748749.1	EST_HUMAN	AV748749 NPC Homo sapiens cDNA clone NPCBVA05 5'
10509	23003	36011	0.51	1.0E-68	BE044565.1	EST_HUMAN	h047N02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:3040563 3'
10821	23342	36357	1.98	1.0E-68	AF111167.2	NT	Homo sapiens Jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11801	24240		3	9.0E-67	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
403	13078	25570	3.59	7.0E-67	AW162232.1	EST_HUMAN	au75402.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782083 3' similar to gb:M37104 ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
1425	14018	26547	1.75	7.0E-67	AA383416.1	EST_HUMAN	EST86812 Testis 1 Homo sapiens cDNA 5' end similar to similar to C. elegans hypothetical protein, ccsmid ZK353
1801	14183	26724	1.25	7.0E-67	W85947.1	EST_HUMAN	zh5805.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:416049 5'
1801	14183	26725	1.25	7.0E-67	W85947.1	EST_HUMAN	zh5805.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:416049 5'
2838	13078	25570	3.15	7.0E-67	AW162232.1	EST_HUMAN	au75402.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782083 3' similar to gb:M37104 ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
6231	18940	31612	0.98	7.0E-67	10180895	NT	Homo sapiens zinc finger protein 304 (ZNF304), mRNA
6416	18018	31802	1.79	7.0E-67	11425572	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
6416	18018	31803	1.79	7.0E-67	11425572	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
6823	19413	32230	1.03	7.0E-67	4885084	NT	Homo sapiens ATPase, H ⁺ transporting, lysosomal (vacuolar proton pump) non-catalytic accessory protein 1A (110/116KD) (ATP6N1A), mRNA
7827	20139	33018	0.99	7.0E-67	11418212	NT	Homo sapiens mitochondrial carrier family protein (LOC55972), mRNA
7827	20139	33019	0.99	7.0E-67	11418212	NT	Homo sapiens mitochondrial carrier family protein (LOC55972), mRNA
8012	20554	33457	0.49	7.0E-67	4828895	NT	Homo sapiens phosphodiesterase 1nucleotide pyrophosphatase 3 (PDNIP3) mRNA
8265	20806	33724	0.8	7.0E-67	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
8862	21401	34328	0.78	7.0E-67	10835044	NT	Homo sapiens retinaldehyde dehydrogenase 2 (RALDH2), mRNA
11526	23073	37043	2.62	7.0E-67	U82488.1	NT	Human cytochrome oxidase subunit VIa (COXA1P) pseudogene, complete cds
11675	24094	37147	2.85	7.0E-67	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
11675	24094	37148	2.85	7.0E-67	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12159	24399	30979	1.44	7.0E-67	AB011398.1	NT	Homo sapiens gene for AF-8, complete cds
585	13215	25692	1.84	6.0E-67	X68898.1	NT	H. sapiens mRNA for acetyl-CoA carboxylase
828	13445	25652	1.84	6.0E-67	Z1727.1	NT	Homo sapiens mRNA for transmembrane receptor protein
1316	13910	26430	1.2	6.0E-67	Y14320.1	NT	Homo sapiens PMP69 gene, exons 3, 4, 5, 6 & 7
3485	16080	28562	1.47	6.0E-67	4507332	NT	Homo sapiens Synapsin III (SYN3) mRNA, and translated products
3485	16080	28563	1.47	6.0E-67	4507332	NT	Homo sapiens Synapsin III (SYN3) mRNA, and translated products
4205	16794	29240	0.74	6.0E-67	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4205	16794	29241	0.74	6.0E-67	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4815	17383	29845	3.86	6.0E-67	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
4815	17393	29848	3.86	6.0E-67	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
3258	15870	28350	2.65	5.0E-67	AF008680.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
10863	23384		1.9	5.0E-67	BE010038.1	EST_HUMAN	PM3-BN0176-100400-001-q04 BIN0176 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1373	13987	28494	1.16	4.0E-67	R80819.1	EST_HUMAN	y02411.1 Soares adult brain N2b4HB56Y Homo sapiens cDNA clone IMAGE:167253 5'
7984	20508	33413	0.88	4.0E-67	A1733032.1	EST_HUMAN	d26005.x5 NCI_CGAP_K143 Homo sapiens cDNA clone IMAGE:1493288 3' similar to SW-Z33A_HUMAN
8322	20863		1.3	4.0E-67	BF367321.1	EST_HUMAN	Q08730 ZINC FINGER PROTEIN 33A ;
10842	23458		1.92	4.0E-67	AA714294.1	EST_HUMAN	RC0-HT0834-150900-028-c03 HT0834 Homo sapiens cDNA
2639	13284	26766	6.7	3.0E-67	AA333768.1	EST_HUMAN	rm08a01.s1 NCI_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1238472 3' similar to TR-O10385 O10385
4804	17382	28832	3.38	3.0E-67	AW889159.1	EST_HUMAN	PRO-POL-DUTPASE POLYPROTEIN ;
4831	17408		0.93	3.0E-67	AL163278.2	NT	EST17903 Embryo, 9 week Homo sapiens cDNA 5' end
8122	20663	33573	1.17	3.0E-67	BF198068.1	EST_HUMAN	MF3-SN0068-040500-008-401 SN0068 Homo sapiens cDNA
11139	23847		22.61	3.0E-67	AA927874.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C079
201	12862	25348	1.74	2.0E-67	BE348354.1	EST_HUMAN	hr8105.x1 NCI_CGAP_K1411 Homo sapiens cDNA clone IMAGE:3134913 3' similar to SW-FHOP_MOUSE
878	13492	28010	4.98	2.0E-67	AW810405.1	EST_HUMAN	Q61085 GTP-RHO BINDING PROTEIN 1 ;
1144	13747		1.64	2.0E-67	AF167480.1	NT	om18b07.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1541365 3'
1828	14512	27089	1.5	2.0E-67	BE303037.1	EST_HUMAN	hw18g09.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3183138 3' similar to WP-F23H11.9
1828	14512	27070		2.0E-67	BE303037.1	EST_HUMAN	CE08817 ;
2428	14895	27870	2.84	2.0E-67	AF308561.1	NT	QV4-ST0234-181198-037-405 ST0234 Homo sapiens cDNA
2475	15042	27810	0.95	2.0E-67	4758795	NT	Homo sapiens double stranded RNA activated protein kinase (PKR) gene, exons 2a, 2, 3, and 4
3514	16119	28599	4.48	2.0E-67	AA825755.1	EST_HUMAN	ba172g05.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2805976 5' similar to TR-O84882 O84882
4074	16670	29131	2.78	2.0E-67	AL163300.2	NT	KUAA0798 PROTEIN ;
6222	18831	31005	0.83	2.0E-67	AL049784.1	NT	ba172g05.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2805976 5' similar to TR-O84882 O84882
6273	18881	31049	5.18	2.0E-67	BF240758.1	EST_HUMAN	KUAA0798 PROTEIN ;
6438	19040	31827	2.25	2.0E-67	AB051763.1	NT	Homo sapiens KRAB zinc finger protein ZFQR mRNA, complete cds
6438	19040	31828	2.23	2.0E-67	AB051763.1	NT	Homo sapiens developmentally regulated GTP-binding protein 1 (DRG1), mRNA
8463	21032	33952	0.98	2.0E-67	AA334609.1	EST_HUMAN	zu81g01.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:745392 3'
8463	21032	33953	0.98	2.0E-67	AA334609.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C100
8827	21465	34381	1.08	2.0E-67	AW602635.1	EST_HUMAN	Novel human gene mapping to chromosome 13
8827	21465	34382	1.09	2.0E-67	AW602635.1	EST_HUMAN	601875351F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4091893 5'
9488	21943	34890	1.24	2.0E-67	AV791333.1	EST_HUMAN	Homo sapiens mRNA for NADPH-cytochrome P-450 reductase, complete cds
9625	22125	35089	1.19	2.0E-67	AW283624.1	EST_HUMAN	Homo sapiens mRNA for NADPH-cytochrome P-450 reductase, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10781	23305	36313	1.57	2.0E-67	BF685788.1	EST_HUMAN	602140470F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4301705 5'
10834	26127		3.62	2.0E-67	11436448	NT	Homo sapiens KIAA0885 protein (KIAA0885), mRNA
11107	23617	36859	1.85	2.0E-67	BE296714.1	EST_HUMAN	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
11330	23028	36037	2.01	2.0E-67	BF377169.1	EST_HUMAN	PM2-TN0103-040900-001-c02 TN0103 Homo sapiens cDNA
12034	24911	30714	2.53	2.0E-67	11418188	NT	Homo sapiens thyroid autoantigen T04D (Ku antigen) (GZ2P1), mRNA
12347	24528	30925	2.28	2.0E-67	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), mRNA
274	12931	25418	3.31	1.0E-67	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease neuro-II, Alzheimer disease) (APP), mRNA
737	13357	25951	1.2	1.0E-67	AA702764.1	EST_HUMAN	z80b04.s1 Soares fetal_liver_spleen_1NPLS_S1 Homo sapiens cDNA clone IMAGE:448015 3'
2220	14786	27368	1.73	8.0E-68	BE870732.1	EST_HUMAN	601148568F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3852254 5'
3637	16535	28001	5.37	8.0E-68	AA209456.1	EST_HUMAN	z82h10.r1 Stratiene hNT neuron (#837233) Homo sapiens cDNA clone IMAGE:848163 5' similar to SW:SAV_SULAC Q07890 SAV PROTEIN. ;
3637	16535	28002	5.37	8.0E-68	AA209456.1	EST_HUMAN	z82h10.r1 Stratiene hNT neuron (#837233) Homo sapiens cDNA clone IMAGE:848163 5' similar to SW:SAV_SULAC Q07890 SAV PROTEIN. ;
8045	20587	33493	0.53	7.0E-68	AB10505.1	EST_HUMAN	w88e03.x1 NCJ CGAP P128 Homo sapiens cDNA clone IMAGE:2312860 3'
10346	22840	35836	2.93	6.0E-68	11422086	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
12349	24530		3.32	8.0E-68	BE812554.1	EST_HUMAN	601452087F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3855781 5'
835	15389	25980	0.67	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
835	15389	25981	0.67	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
852	13468	25977	4.94	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
852	13468	25978	4.54	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
2808	15380	27827	72.63	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3181	15704	28268	3.22	5.0E-68	AB037852.1	NT	Homo sapiens mRNA for KIAA1431 protein, partial cds
4260	16846		0.63	5.0E-68	4828887	NT	Homo sapiens retinoblastoma-binding protein 2 (RBBP2) mRNA
4590	17173	28618	1.21	5.0E-68	AL157845.1	EST_HUMAN	DKFZp547D207_r1 547 (synonym: hbr1) Homo sapiens cDNA clone DKFZp547D207 5'
5111	17683		8.82	4.0E-68	P04406	SWISSPROT	GLYCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE, LIVER
6118	18734	31487	0.76	4.0E-68	AF157083.1	NT	Homo sapiens sedlin (SED1) gene, exon 4
6870	19804	32437	6.01	4.0E-68	11055891	NT	Homo sapiens serine carboxypeptidase 1 precursor protein (HSCP1), mRNA
6870	19804	32438	6.01	4.0E-68	11055891	NT	Homo sapiens serine carboxypeptidase 1 precursor protein (HSCP1), mRNA
7874	20185	33073	0.92	4.0E-68	7681683	NT	Homo sapiens DKFZP588L0724 protein (DKFZP588L0724), mRNA
8970	21508	34428	5.04	4.0E-68	D63479.2	NT	Homo sapiens mRNA for KIAA0745 protein, partial cds
8970	21508	34430	5.04	4.0E-68	D63479.2	NT	Homo sapiens mRNA for KIAA0745 protein, partial cds
9108	21642	34582	2.9	4.0E-68	AB040918.1	NT	Homo sapiens mRNA for KIAA1485 protein, partial cds
10882	23403	36420	5.14	4.0E-68	4508282	NT	Homo sapiens protein tyrosine phosphatase type IVA, member 1 (PTP4A1) mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10882	23403	38421	5.14	4.0E-68	4506282	NT	Homo sapiens protein tyrosine phosphatase type IVA, member 1 (PTP4A1) mRNA
12225	24446	30953	2.91	4.0E-68	11417866	NT	Homo sapiens SEC14 (S. cerevisiae) like 2 (SEC14L2), mRNA
3722	16323	28790	2.56	3.0E-68	AF236082.1	NT	Mus musculus G-protein coupled receptor GPR73 (Gpr73) mRNA, complete cds
9378	20317		6.15	3.0E-68	A1342323.1	EST_HUMAN	q338h02.x1 Soares_fetal_lung_Nib-IL19W Homo sapiens cDNA clone IMAGE:1950281 3' similar to contains THR12 THR repetitive element;
10396	22890	35884	1.77	3.0E-68	F28784.1	EST_HUMAN	HSPD18178 H43 Homo sapiens cDNA clone s3000023D09
12571	24829		2.05	3.0E-68	AW939485.1	EST_HUMAN	QV1-DT0072-010200-058-H06 DT0072 Homo sapiens cDNA
2887	18011		27.71	2.0E-68	D00622.1	NT	Cricetulus longicaudatus mRNA for EF-1 alpha, complete cds
4097	16882	29149	0.78	2.0E-68	BE675786.1	EST_HUMAN	711602.x1 NCI_CGAP CLL1 Homo sapiens cDNA clone IMAGE:3294747 3' similar to TR:080828 O80828 HYPOTHETICAL 88.8 KD PROTEIN;
4769	17369	28821	1.56	2.0E-68	AB008881.1	NT	Homo sapiens gene for actin receptor type IIB, complete cds
6957	19534		8.88	2.0E-68	R45088.1	EST_HUMAN	ys38g04.s1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:34886 3'
7123	19463	32280	4.61	2.0E-68	BF033316.1	EST_HUMAN	601458514F1 NIH_MGC 88 Homo sapiens cDNA clone IMAGE:3682034 5'
8879	21417	34341	0.84	2.0E-68	Q05859	SWISSPROT	FORMIN 4 (LIMB DEFORMITY PROTEIN)
10484	22888	35886	0.46	2.0E-68	N78483.1	EST_HUMAN	yz78d07.f1 Soares_multiple_sclerosis_2N6HMSHP Homo sapiens cDNA clone IMAGE:289165 5'
11792	25077		2.11	2.0E-68	BE887376.1	EST_HUMAN	601437367F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:3622192 5'
12639	24714		1.84	2.0E-68	AW016803.1	EST_HUMAN	U1H-B10-asm-b-05-0-U1.s1 NCI_CGAP Sub1 Homo sapiens cDNA clone IMAGE:2708624 3'
83	12759	25242	0.78	1.0E-68	4505222	NT	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
318	12872	25461	12.22	1.0E-68	AW618405.1	EST_HUMAN	QV4-ST0234-181189-037-R05 ST0234 Homo sapiens cDNA
2284	14868	27443	0.89	1.0E-68	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
2284	14868	27444	0.89	1.0E-68	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
2785	15338	27809	1.12	1.0E-68	AW451832.1	EST_HUMAN	U1H-B13-alk-f-01-0-U1.s1 NCI_CGAP Sub5 Homo sapiens cDNA clone IMAGE:2737272 3'
6178	17745	30174	0.86	1.0E-68	AA897343.1	EST_HUMAN	id47g12.s1 Soares_NFL_I_GBC_S1 Homo sapiens cDNA clone IMAGE:1460518 3'
5233	17787	30215	0.88	1.0E-68	BE286032.1	EST_HUMAN	60117002F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532344 5'
5626	16157	30572	1.51	1.0E-68	7682349	NT	Homo sapiens cell recognition molecule Caspr2 (KIAA0868), mRNA
10085	22580	35573	0.49	1.0E-68	11419429	NT	Homo sapiens similar to ectonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC83214), mRNA
10732	23258	36274	2.83	1.0E-68	11418869	NT	Homo sapiens phosphodiesterase 7B (PDE7B), mRNA
10732	23258	36275	2.83	1.0E-68	11418869	NT	Homo sapiens phosphodiesterase 7B (PDE7B), mRNA
10783	23307	36314	3.41	1.0E-68	L78416.1	NT	Homo sapiens MIF2 suppressor (HSM13) mRNA, complete cds
11072	23594	36625	1.72	1.0E-68	11433277	NT	Homo sapiens myosin IC (MYO1C), mRNA
11179	23685	36731	2.23	1.0E-68	U50319.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 4-5
11179	23685	36732	2.23	1.0E-68	U50319.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 4-5
11517	23965	37036	2.1	1.0E-68	11418431	NT	Homo sapiens CGI-76 protein (LOC51632), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11517	23065	37037	2.1	1.0E-08	11418431	NT	Homo sapiens CGI-78 protein (LOC51632), mRNA
12330	12759	25242	2.37	1.0E-08	4505222	NT	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
12818	24697		1.62	1.0E-08	11418213	NT	Homo sapiens ADP-ribosylation factor GTPase activating protein 1 (ARFGAP1), mRNA
23	12702	25158	13.45	9.0E-09	5031978	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
23	12702	25159	13.45	9.0E-09	5031978	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
1065	13670	26180	1.44	9.0E-09	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
1065	13670	26181	1.44	9.0E-09	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
4208	16787	28245	0.69	9.0E-09	4757867	NT	Homo sapiens v-rat murine sarcoma viral oncogene homolog B1 (BRAF) mRNA
5384	17943	30358	0.9	9.0E-09	AF057177.1	NT	Homo sapiens T-cell receptor gamma V1 gene region
10769	23263		11.7	9.0E-09	AU117241.1	EST_HUMAN	AU117241 HEMBA1 Homo sapiens cDNA clone HEMBA1000988 5'
3433	16041		1.56	8.0E-09	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
6493	19094	31878	5.18	7.0E-09	9866912	NT	Homo sapiens actin-related protein 3-beta (ARPP38ETA), mRNA
7804	20347	33254	22.34	6.0E-09	A1182794.1	EST_HUMAN	q62201.x1 Soares fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1743601 3' similar to gb:1.11568 60S RIBOSOMAL PROTEIN L18 (HUMAN);
7804	20347	33255	22.34	6.0E-09	A1182794.1	EST_HUMAN	q62201.x1 Soares fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1743601 3' similar to gb:1.11568 60S RIBOSOMAL PROTEIN L18 (HUMAN);
8804	21442	34365	0.98	5.0E-09	A4828039.1	EST_HUMAN	cd80a03.at NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1372300 3'
546	13177		1.07	4.0E-09	A1873630.1	EST_HUMAN	wm20h11.x1 NCI_CGAP_U4 Homo sapiens cDNA clone IMAGE:2437125 3'
5934	24761	31283	1.58	4.0E-09	BE561063.1	EST_HUMAN	601344705F1 NIH_MGC 8 Homo sapiens cDNA clone IMAGE:3677841 5'
6009	18629	31384	4.7	4.0E-09	A1784973.1	EST_HUMAN	wh57b08.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2384819 3' similar to TR:O55137 O55137 ACYL-COA THIOESTERASE ;
6739	18333	32139	2.45	4.0E-09	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
6739	18333	32140	2.45	4.0E-09	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
8845	21384	34309	0.59	4.0E-09	AU118034.1	EST_HUMAN	AU118034 HEMBA1 Homo sapiens cDNA clone HEMBA1006283 5'
12683	24733		2.98	4.0E-09	A1187052.1	EST_HUMAN	q61305.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1736881 3'
409	13084	25577	4.92	3.0E-09	BE258012.1	EST_HUMAN	601110371F1 NIH_MGC 16 Homo sapiens cDNA clone IMAGE:3351352 5'
640	13263	25739	2.24	3.0E-09	AF221712.1	NT	Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
1602	14194		1.13	3.0E-09	T80514.1	EST_HUMAN	yd08a02.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:24980 5' similar to SP-A48838 A48838 SPEGF III=EGF REPEAT-CONTAINING FIBROPEL-LIKE PROTEIN - SEA URCHIN ;
2415	14983		1.34	3.0E-09	5728910	NT	Homo sapiens lymphatic vessel endothelial hyaluronan receptor 1 (LYVE-1) mRNA
4688	17270		0.77	3.0E-09	T86234.1	EST_HUMAN	ye48h04.r1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:121015 5'
5407	17270		0.61	3.0E-09	T86234.1	EST_HUMAN	ye48h04.r1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:121015 5'
5452	18021	37141	1.37	3.0E-09	11418185	NT	Homo sapiens acotinase 2, mitochondrial (ACO2), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6894	19628		0.99	3.0E-69	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5(3')-deoxynucleotidase (dNT-2 gene), exons 1-5
7407	19932	32786	0.87	3.0E-68	AF095703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
7449	19973	32840	1.42	3.0E-69	U52351.1	NT	Homo sapiens arm-repeat protein NPRAP/neurogranin (CTNND2) mRNA, partial cds
7554	20073	32949	7.75	3.0E-69	AF268075.1	NT	Homo sapiens TRAF6-binding protein T89P mRNA, complete cds
8313	20854	33780	0.87	3.0E-69	AW138948.1	EST_HUMAN	UIH-B11-acw-g-01-Q-U1.s1 NC1_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2715840 3'
8703	21242		1.8	3.0E-69	AA376399.1	EST_HUMAN	EST88807 HSC172 cells II Homo sapiens cDNA 5' and similar to ribosomal protein S18
8907	21445	34367	0.5	3.0E-69	8823248	NT	Homo sapiens hypothetical protein FLJ20275 (FLJ20275), mRNA
9334	21848	34797	1.77	3.0E-69	X13223.1	NT	H. sapiens mRNA for N-acetylglucosaminide-(beta 1-4)-galactosyltransferase
							Human mRNA for calcium-binding protein in macrophages (MRP-14) macrophage migration inhibitory factor (MIF)-related protein
9452	21978	34930	8.92	3.0E-69	X08233.1	NT	Homo sapiens SEC10 (S. cerevisiae)-like 1 (SEC10L1), mRNA
9743	22241	35222	0.55	3.0E-68	5730036	NT	Homo sapiens ribosomal protein S15a (RPS15A), mRNA
10520	23056	36068	3.93	3.0E-69	11432120	NT	EST88807 HSC172 cells II Homo sapiens cDNA 5' and similar to ribosomal protein S18
10721	23249		12.34	3.0E-69	AA376399.1	EST_HUMAN	Homo sapiens HGC8.2 protein (HGC8.2), mRNA
11813	24185		3.88	3.0E-69	11419157	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
134	13062	25556	1.07	2.0E-69	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
134	13062	25557	1.07	2.0E-69	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
429	13062	25556	5.07	2.0E-69	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
429	13062	25557	5.07	2.0E-69	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
1928	14513	27071	1.46	2.0E-69	BE257857.1	EST_HUMAN	601108444F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350074 5'
2869	15487		2.88	2.0E-69	AA431157.1	EST_HUMAN	zw71g02.r1 Sources_basid_NHT Homo sapiens cDNA clone IMAGE:781882 5'
8489	21028	33946	0.82	2.0E-69	AA114270.1	EST_HUMAN	zm28g01.r1 Streptococcus pneumoniae (#637208) Homo sapiens cDNA clone IMAGE:527088 5'
1740	14330	28874	1.89	1.0E-69	AF053788.1	NT	Rattus norvegicus brain specific cortactin-binding protein CBP80 mRNA, partial cds
5173	17740		0.58	1.0E-69	BE403094.1	EST_HUMAN	601301284F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635781 5'
6201	18811	31580	0.76	1.0E-69	BE902501.1	EST_HUMAN	601675788F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3658532 5'
6201	18811	31581	0.76	1.0E-69	BE902501.1	EST_HUMAN	601675788F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3658532 5'
6717	18911	32114	4.38	1.0E-69	AW393989.1	EST_HUMAN	QV6-TT0010-031189-045-c07 TT0010 Homo sapiens cDNA
6808	19842	32478	1.4	1.0E-69	7682283	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
6908	19842	32479	1.4	1.0E-69	7682283	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
6924	19583	32412	3.33	1.0E-69	AB032973.1	NT	Homo sapiens mRNA for KIAA1147 protein, partial cds
6924	19583	32413	3.33	1.0E-69	AB032973.1	NT	Homo sapiens mRNA for KIAA1147 protein, partial cds
10077	22572	35566	6.1	1.0E-69	BE245070.1	EST_HUMAN	TCBAP1E2878 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TC8A Homo sapiens cDNA clone TCBAP2678

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10077	22572	35587	5.1	1.0E-68	BE245070.1	EST_HUMAN	TCBAP1E2678 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP2678
10168	22884	35659	1.41	1.0E-69	AB014607.1	NT	Homo sapiens mRNA for KIAA0707 protein, partial cds
10313	22807	35788	0.47	1.0E-68	BF528428.1	EST_HUMAN	602043782F1 NCI_CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4181325 5'
10751	23275		14.22	1.0E-68	4504818	NT	Homo sapiens keratin 8 (KRT8) mRNA
11745	24144	36788	1.61	1.0E-68	BF125887.1	EST_HUMAN	601762802F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4025785 5'
12188	24408		4.89	1.0E-68	AI808884.1	EST_HUMAN	wf84e08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2380390 3' similar to contains Abu repetitive element; contains element MIR repetitive element ;
2370	15484	27513	1.52	8.0E-70	AA230303.1	EST_HUMAN	nc13d12.11 NCI_CGAP_P71 Homo sapiens cDNA clone IMAGE:1008023
4483	17049	28493	1.81	8.0E-70	L77588.1	NT	Homo sapiens DGS-1 mRNA, 3' end
1848	14437	28893	1.65	7.0E-70	AI487807.1	EST_HUMAN	bm88f01.x1 NCI_CGAP_Bm26 Homo sapiens cDNA clone IMAGE:2165305 3'
1849	14437	28894	1.65	7.0E-70	AI487807.1	EST_HUMAN	bm88f01.x1 NCI_CGAP_Bm26 Homo sapiens cDNA clone IMAGE:2165305 3'
1974	14558	27115	1.64	7.0E-70	AA282855.1	EST_HUMAN	z115p04.r1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:713239 5'
2109	14687		3.14	7.0E-70	5031688	NT	Homo sapiens tumor suppressor deleted in oral cancer-related 1 (DOC-1R) mRNA
4308	16895	29339	4.83	7.0E-70	4757723	NT	Homo sapiens adenylate cyclase 3 (ADCY3) mRNA
5874	18301	30782	5.56	7.0E-70	AB032368.1	NT	Homo sapiens MIST mRNA, partial cds
5874	18301	30783	5.56	7.0E-70	AB032368.1	NT	Homo sapiens MIST mRNA, partial cds
7004	19502	32321	3.22	7.0E-70	AJ000052.1	NT	Homo sapiens gene encoding splicing factor SF1, exons 2-8
7745	20253	33147	0.87	7.0E-70	11417308	NT	Homo sapiens titin immunoglobulin domain protein (myotilin) (TTID), mRNA
8370	20910	33828	2.67	7.0E-70	AB037715.1	NT	Homo sapiens mRNA for KIAA1284 protein, partial cds
8370	20910	33830	2.67	7.0E-70	AB037715.1	NT	Homo sapiens mRNA for KIAA1284 protein, partial cds
8856	21185	34114	3.59	7.0E-70	M74089.1	NT	Human displacement protein (CCAAT) mRNA
8856	21185	34115	3.59	7.0E-70	M74089.1	NT	Human displacement protein (CCAAT) mRNA
9084	21620	34555	3.59	7.0E-70	X59841.1	NT	Human PBX3 mRNA
9084	21620	34556	3.59	7.0E-70	X59841.1	NT	Human PBX3 mRNA
9356	20285	33184	3.84	7.0E-70	AF153715.1	NT	Homo sapiens phospholipid scramblase 1 gene, exon 1 and 5' flanking region
9382	20320	33223	2.01	7.0E-70	11525884	NT	Homo sapiens karyopherin beta 2b, transportin (TRN2), mRNA
9382	20320	33224	2.01	7.0E-70	11525884	NT	Homo sapiens karyopherin beta 2b, transportin (TRN2), mRNA
9575	22075	35038	1.33	7.0E-70	4557624	NT	Homo sapiens glutamate-cysteine lyase (gamma-glutamylcysteine synthetase), catalytic (72.8kD) (GLCLC) mRNA
10188	22884	35688	0.61	7.0E-70	AB036428.1	NT	Homo sapiens NDST4 mRNA for N-deacetylaseN-sulfotransferase 4, complete cds
10188	22884	35687	0.61	7.0E-70	AB036428.1	NT	Homo sapiens NDST4 mRNA for N-deacetylaseN-sulfotransferase 4, complete cds
10953	23468	36492	1.59	7.0E-70	11429885	NT	Homo sapiens spastic paraplegia 4 (autosomal dominant; spastin) (SPG4), mRNA
10953	23468	36493	1.59	7.0E-70	11429885	NT	Homo sapiens spastic paraplegia 4 (autosomal dominant; spastin) (SPG4), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11468	23918	36988	2.2	7.0E-70	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
11468	23918	36987	2.2	7.0E-70	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
904	13518	28036	2	6.0E-70	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant, Alzheimer disease) (APP), mRNA
2182	14756	27328	1.02	6.0E-70	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
2551	15115	27885	1.42	6.0E-70	8923689	NT	Homo sapiens CMP-N-acetylneuraminic acid synthase (LOC55907), mRNA
2568	15470	27715	1.68	5.0E-70	7682307	NT	Homo sapiens KIAA0782 gene product (KIAA0782), mRNA
2568	15470	27718	1.68	5.0E-70	7682307	NT	Homo sapiens KIAA0792 gene product (KIAA0792), mRNA
11756	24151		3.78	5.0E-70	BE180334.1	EST_HUMAN	MF3-HIT0497-150200-115-606 HIT0497 Homo sapiens cDNA
6851	19440	32255	153.56	4.0E-70	T06037.1	EST_HUMAN	EST03926 Fetal brain, Strabagene (cat8936206) Homo sapiens cDNA clone HFBDN25
6887	19622	32456	0.79	4.0E-70	AW793226.1	EST_HUMAN	CH44-UM0003-010300-105-g08 UM0003 Homo sapiens cDNA
6887	19622	32457	0.79	4.0E-70	AW793226.1	EST_HUMAN	CH44-UM0003-010300-105-g08 UM0003 Homo sapiens cDNA
1633	14225	28756	1.19	3.0E-70	BE071796.1	EST_HUMAN	RCO-BT0522-071299-011-012 BT0522 Homo sapiens cDNA
1633	14225	28757	1.19	3.0E-70	BE071796.1	EST_HUMAN	RCO-BT0522-071299-011-012 BT0522 Homo sapiens cDNA
6100	18716	31467	0.9	3.0E-70	AI831975.1	EST_HUMAN	wh90403.x1 NC1 CGAP CLL1 Homo sapiens cDNA clone IMAGE:2389005 3'
6511	19111	31897	2.36	3.0E-70	BF685233.1	EST_HUMAN	602141561F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4302808 5'
6511	19111	31898	2.36	3.0E-70	BF685233.1	EST_HUMAN	602141561F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4302808 5'
41	12720	25161	0.89	2.0E-70	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
718	13339	25826	11.56	2.0E-70	N42161.1	EST_HUMAN	yy07a10.r1 Soares melanocyte 2Nbl-HM Homo sapiens cDNA clone IMAGE:270522 5' similar to SW:D3HI_RAT P28268 3-HYDROXYISOBUTYRATE DEHYDROGENASE PRECURSOR ;
718	13339	25827	11.56	2.0E-70	N42161.1	EST_HUMAN	yy07a10.r1 Soares melanocyte 2Nbl-HM Homo sapiens cDNA clone IMAGE:270522 5' similar to SW:D3HI_RAT P28268 3-HYDROXYISOBUTYRATE DEHYDROGENASE PRECURSOR ;
734	13354	25850	3.41	2.0E-70	AI246899.1	EST_HUMAN	g551H01.x1 NC1 CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2004913 3'
1058	13684	26175	1.89	2.0E-70	8923689	NT	Homo sapiens hypothetical protein FLJ20758 (FLJ20758), mRNA
1226	13825	26340	1.29	2.0E-70	7681983	NT	Homo sapiens KIAA0183 gene product (KIAA0183), mRNA
1226	13825	26341	1.29	2.0E-70	7681983	NT	Homo sapiens KIAA0183 gene product (KIAA0183), mRNA
1778	14368	26912	1.48	2.0E-70	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
2359	14930		4.22	2.0E-70	AA054010.1	EST_HUMAN	zf48g04.r1 Soares retina N2b4-HR Homo sapiens cDNA clone IMAGE:380214 5' similar to SW:GAG_HTL1A
3688	16289	28758	2.21	2.0E-70	H37888.1	EST_HUMAN	PO3345 GAG POLYPROTEIN ;
3891	16490	28950	0.8	2.0E-70	AL133207.2	NT	Novel human gene mapping to chromosome X
4123	16716	29172	5.05	2.0E-70	M69181.1	NT	Human nonmuscle myosin heavy chain-B (MYH10) mRNA, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5708	18332	30838	8.49	2.0E-70	X72882.1	NT	H. sapiens gene for schwannomin (CS8)
5708	18332	30837	8.49	2.0E-70	X72882.1	NT	H. sapiens gene for schwannomin (CS8)
6351	18958	31735	1.22	2.0E-70	AF310105.1	NT	Homo sapiens NALP1 mRNA, complete cds
6745	18338	32144	1.97	2.0E-70	D12825.1	NT	Human mRNA for NF1 protein isoform (neurofibromin isoform), complete cds
6773	19065	32176	9.77	2.0E-70	AF123074.1	NT	Human sapiens cytoplasmic dynein intermediate chain 1 mRNA, complete cds
6773	18365	32177	9.77	2.0E-70	AF123074.1	NT	Homo sapiens cytoplasmic dynein intermediate chain 1 mRNA, complete cds
7070	18089	30448	1.64	2.0E-70	11422842	NT	Homo sapiens sialyltransferase 8 (N-acetylglucosaminidase alpha 2,3-sialyltransferase) (SIAT8), mRNA
7434	19958	32823	0.84	2.0E-70	AF288207.1	NT	Homo sapiens cystathionine synthase mRNA, complete cds, alternatively spliced
7859	20401	33307	6.42	2.0E-70	M21741.1	NT	Human guanine nucleotide-binding protein alpha-subunit gene (G-s-alpha), exons 4 and 5
8164	20705	33621	0.75	2.0E-70	11423599	NT	Homo sapiens amylo-1,8-glucosidase, 4-alpha-glucanotransferase (glycogen debranching enzyme, glycogen storage disease type III) (AGL), mRNA
8594	21133	34571	0.8	2.0E-70	H47959.1	EST_HUMAN	yp79g02.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:193882 5'
9098	21832	34571	0.97	2.0E-70	11526355	NT	Homo sapiens dynactin p82 subunit (LOC51184), mRNA
10044	22539	35538	1.3	2.0E-70	AF123303.1	NT	Homo sapiens calcium-binding transporter mRNA, partial cds
10490	22984	35982	0.8	2.0E-70	AB033042.1	NT	Homo sapiens mRNA for KIAA1216 protein, partial cds
10650	23465	36487	3.48	2.0E-70	8923420	NT	Homo sapiens hypothetical protein FLJ20450 (FLJ20450), mRNA
10650	23465	36488	3.48	2.0E-70	8923420	NT	Homo sapiens hypothetical protein FLJ20450 (FLJ20450), mRNA
11497	23946	37018	7.73	2.0E-70	4503520	NT	Homo sapiens eukaryotic translation initiation factor 3, subunit 6 (48K) (EIF3S6), mRNA
12157	24397	30978	2.52	2.0E-70	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12157	24397	30977	2.52	2.0E-70	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
3440	18048		2.73	1.0E-70	4507478	NT	Homo sapiens transglutaminase 3 (E polypeptide, protein-glutamine-gamma-glutamyltransferase) (TGM3) mRNA
9204	21721		0.64	1.0E-70	W85785.1	EST_HUMAN	zh55g05.r1 Soares fetal liver spleen 1NFLS_S1 Homo sapiens cDNA clone IMAGE:418024 5'
9714	22212		0.81	1.0E-70	AA44292.1	EST_HUMAN	zf54c03.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:757444 5'
10814	23335	36348	15.93	1.0E-70	AV738538.1	EST_HUMAN	AV738538 CB Homo sapiens cDNA clone CBLB810 5'
6099	18715	31465	9.2	9.0E-71	A1143870.1	EST_HUMAN	qe04f01.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1738009 3' similar to TR:O14045
6099	18715	31466	9.2	9.0E-71	A1143870.1	EST_HUMAN	qe04f01.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1738009 3' similar to TR:O14045
7098	19689	32508	1.82	9.0E-71	A1654903.1	EST_HUMAN	q14045 PHOSPHOTRANSFERASE. ;
11399	19689	32508	5.11	9.0E-71	A1654903.1	EST_HUMAN	q14045 PHOSPHOTRANSFERASE. ;
							wf52c05.x1 NC1_CGAP_G08 Homo sapiens cDNA clone IMAGE:2308288 3' similar to TR:P97213 P97213
							CDU2, CDU1, TCDD, TCDB, TCDE, TCDA, TCDC, CDD1, CDD2, CDD3, AND CDD4 GENES. ;
							wf52c05.x1 NC1_CGAP_G08 Homo sapiens cDNA clone IMAGE:2308288 3' similar to TR:P97213 P97213
							CDU2, CDU1, TCDD, TCDB, TCDE, TCDA, TCDC, CDD1, CDD2, CDD3, AND CDD4 GENES. ;

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9000	21537		3.85	8.0E-71	AA171451.1	EST_HUMAN	z621611.t1 Stratiene neurospithidium (#637231) Homo sapiens cDNA clone IMAGE:610101 5' similar to TR:G1143061 G1143061 STRAIN XA34 POL;
7410	18635	32800	7.39	7.0E-71	AA442230.1	EST_HUMAN	z60106.t1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:758075 5'
8612	21151	34085	1.34	7.0E-71	AA705497.1	EST_HUMAN	z91a06.s1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:462228 3'
11211	23714	36769	5.33	7.0E-71	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
2251	14825	27401	7.82	5.0E-71	AF056322.1	NT	Homo sapiens SP100-HMG nuclear autoantigen (SP100) mRNA, complete cds
4187	18787	29236	1.17	5.0E-71	AW818405.1	EST_HUMAN	QV4-ST0234-181199-037-405 ST0234 Homo sapiens cDNA
6041	18680	31389	1.72	5.0E-71	4502740	NT	Homo sapiens cyclin-dependent kinase 6 (CDK6) mRNA
6768	18381	32170	1.8	5.0E-71	11841408	NT	Homo sapiens keratin, hair, acidic, 7 (KRT17A7), mRNA
7000	19498	32318	0.8	5.0E-71	7682209	NT	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
7200	19731	32583	0.67	5.0E-71	11431590	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
7520	20040	32908	2.64	5.0E-71	M38106.1	NT	Homo neurofibromatosis protein type 1 mRNA, 3' end of cds
7683	20202	33089	0.72	5.0E-71	11528445	NT	Homo sapiens MAGUK protein p557; Protein Associated with Line 2 (LOC51878), mRNA
7716	20224	33113	20.65	5.0E-71	AF072810.1	NT	Homo sapiens transcription factor WSTF mRNA, complete cds
8480	21000	33916	0.69	5.0E-71	5453777	NT	Homo sapiens nuclear factor related to kappa B binding protein (NFKB) mRNA
8480	21000	33917	0.69	5.0E-71	5453777	NT	Homo sapiens nuclear factor related to kappa B binding protein (NFKB) mRNA
8825	22323		2.28	5.0E-71	X13467.1	NT	Human PrkA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 2)
10513	23051	36082	1.67	6.0E-71	6728900	NT	Homo sapiens IGF-1I mRNA-binding protein 3 (KOC1), mRNA
10859	23380	36398	4.83	5.0E-71	11438514	NT	Homo sapiens pro-platelet basic protein (includes platelet basic protein, beta-thromboglobulin, connective tissue-activating peptide III, neutrophil-activating peptide-2) (PPEP), mRNA
11071	23583	36824	2.24	5.0E-71	11438069	NT	Homo sapiens similar to hypothetical protein FLJ20163 (H. sapiens) (LOC833325), mRNA
11708	24119	37152	1.76	5.0E-71	11417882	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
108	12784	25267	1.08	4.0E-71	4507592	NT	Homo sapiens tumor necrosis factor (ligand) superfamily, member 10 (TNFSF10) mRNA
372	13021	25508	116.83	4.0E-71	AF157628.1	NT	Equus caballus glyceraldehyde-3-phosphate dehydrogenase mRNA, partial cds
372	13021	25507	116.83	4.0E-71	AF157628.1	NT	Equus caballus glyceraldehyde-3-phosphate dehydrogenase mRNA, partial cds
2911	15528	27868	3.25	4.0E-71	4505880	NT	Homo sapiens plasminogen (PLG) mRNA
4519	17103	29549	5.18	4.0E-71	AF056322.1	NT	Homo sapiens SP100-HMG nuclear autoantigen (SP100) mRNA, complete cds
5123	17885	30132	6.54	4.0E-71	7657602	NT	Homo sapiens putative home-binding protein (SOUL), mRNA
7977	20519		1.23	3.0E-71	AU135734.1	EST_HUMAN	AU135734 PLACE1 Homo sapiens cDNA clone PLACE1002775 5'
10572	23107	36121	4.09	3.0E-71	AA557883.1	EST_HUMAN	m45h10.s1 NC1_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043683 similar to contains PTR5.13 PTR5 repetitive element;
1273	13889	28389	6.28	2.0E-71	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C008
5523	18155	30570	6.94	2.0E-71	D87482.1	NT	Human mRNA for KIAA0272 gene, partial cds
5523	18155	30571	6.94	2.0E-71	D87482.1	NT	Human mRNA for KIAA0272 gene, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10478	22872	35879	2.87	2.0E-71	AF095703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
10478	22872	35880	2.97	2.0E-71	AF095703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
10574	23109	36122	3.75	2.0E-71	BE018477.1	EST_HUMAN	bb81a06.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048754 5' similar to SW:R238_HUMAN P54727 UV EXCISION REPAIR PROTEIN RAD23 HOMOLOG B ;
11454	23904	36871	1.95	2.0E-71	R55028.1	EST_HUMAN	y177c11.r1 Scores breast 2Nbl-Bst Homo sapiens cDNA clone IMAGE:154772 5'
11825	24183		10.18	2.0E-71	T05489.1	EST_HUMAN	y643e08.r1 Scores fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:120520 5'
686	13280	25771	1.4	1.0E-71	AI077927.1	EST_HUMAN	oy15e03.s1 Scores_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:1865816 3' similar to contains LOR1 b2 LOR1 repetitive element ;
977	13589	26104	2.23	1.0E-71	7708281	NT	Homo sapiens neuronal cell death-related protein (LOC51616), mRNA
1139	13742	26251	4.37	1.0E-71	AF205800.1	NT	Homo sapiens disabled-2 gene, exons 2 through 15 and complete cds
1385	13979	26506	10.24	1.0E-71	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p44K230) mRNA, complete cds
2129	14707	27278	1.38	1.0E-71	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
2129	14707	27279	1.38	1.0E-71	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
2717	15274	27840	3.73	1.0E-71	7657153	NT	Homo sapiens PMS2L16 mRNA, partial cds
3549	16153	28635	1.24	1.0E-71	AF119685.1	NT	Homo sapiens hairy/enhancer-of-split related with YRPW motif-like (HEYL), mRNA
3658	16259	28730	6.17	1.0E-71	AF246219.1	NT	Homo sapiens inorganic pyrophosphatase mRNA, complete cds
3658	16259	28731	6.17	1.0E-71	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
3710	16311	28778	0.95	1.0E-71	BE122850.1	EST_HUMAN	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
3710	16311	28779	0.95	1.0E-71	BE122850.1	EST_HUMAN	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
3804	16404	28868	2.11	1.0E-71	AF218904.1	NT	02_15 Human Epidermal Keratinocyte Subtraction Library- Upregulated Transcripts Homo sapiens cDNA clone 02_15 5' similar to Homo sapiens chromosome 19
4589	17152	29598	2.19	1.0E-71	D28476.1	NT	02_15 Human Epidermal Keratinocyte Subtraction Library- Upregulated Transcripts Homo sapiens cDNA clone 02_15 5' similar to Homo sapiens chromosome 19
4695	17277	29723	0.61	1.0E-71	H23176.1	EST_HUMAN	Homo sapiens atitrachin precursor (ATRIN) gene, exon 19
6840	19430	32246	1.54	1.0E-71	11428182	NT	Human mRNA for KIAA0045 gene, complete cds
7144	19677	32517	1.33	1.0E-71	AB011131.1	NT	yms58h10.r1 Scores infant brain 1NIB Homo sapiens cDNA clone IMAGE:52528 5'
7352	19878	32743	11.94	1.0E-71	U80793.1	NT	Homo sapiens GCN5 (general control of amino-acid synthesis, yeast, homolog)-like 2 (GCN5L2), mRNA
8089	20630	33543	0.87	1.0E-71	AF105287.1	NT	Homo sapiens CAGL79 mRNA, partial cds
8110	20651	33559	2.11	1.0E-71	11426430	NT	Homo sapiens glypican-6 (GPC6) mRNA, complete cds
8383	20923	33842	3.93	1.0E-71	8922811	NT	Homo sapiens myomesin (M-protein) 2 (185KD) (MYOM2), mRNA
8383	20923	33843	3.93	1.0E-71	8922811	NT	Homo sapiens hypothetical protein FLJ10988 (FLJ10988), mRNA

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9155	21690	34634	0.97	1.0E-71	S72383.1	NT	CSNK2A1=casain kinase II (CKII) subunit alpha [human, Genomic, 18862 nt]
9820	22418	35301	7.06	1.0E-71	AY007643.1	NT	Homo sapiens cytochrome c oxidase subunit VIIa-related protein gene, complete cds
8880	22475		4.9	1.0E-71	AV761217.1	EST_HUMAN	AV761217 MDS Homo sapiens cDNA clone MDSEIA03 5'
10431	22825	35831	1.57	1.0E-71	11433142	NT	Homo sapiens activated leucocyte cell adhesion molecule (ALCAM), mRNA
10663	23196		8.4	1.0E-71	AV761217.1	EST_HUMAN	AV761217 MDS Homo sapiens cDNA clone MDSEIA03 5'
10782	23288	36298	2.09	1.0E-71	11418903	NT	Homo sapiens coagulation factor XIII, A1 polypeptide (F13A1), mRNA
11025	23539	36574	1.82	1.0E-71	11417191	NT	Homo sapiens leucylcystinyl aminopeptidase (LNPEP), mRNA
11025	23539	36575	1.82	1.0E-71	11417191	NT	Homo sapiens leucylcystinyl aminopeptidase (LNPEP), mRNA
12208	24432		15.2	1.0E-71	AB011389.1	NT	Homo sapiens gene for AF-6, complete cds
432	13085	25559	1.33	9.0E-72	A857635.1	EST_HUMAN	wk85g03.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2423188 3' similar to TR:086705 O86705 HYPOTHETICAL 38.6 KD PROTEIN. contains Alu repetitive element
432	13065	25560	1.33	9.0E-72	A857635.1	EST_HUMAN	wk85g03.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2423188 3' similar to TR:086705 O86705 HYPOTHETICAL 38.6 KD PROTEIN. contains Alu repetitive element
6258	18868	31638	0.87	8.0E-72	BF035752.1	EST_HUMAN	601456747F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3882451 5'
10890	23504	36533	2.04	8.0E-72	11424480	NT	Homo sapiens nuclear RNA helicase, DECD variant of DEAD box family (DDXL), mRNA
10890	23504	36534	2.04	8.0E-72	11424480	NT	Homo sapiens nuclear RNA helicase, DECD variant of DEAD box family (DDXL), mRNA
10890	23504	36535	2.04	8.0E-72	11424480	NT	Homo sapiens nuclear RNA helicase, DECD variant of DEAD box family (DDXL), mRNA
4190	16778	29225	1.48	7.0E-72	4501866	NT	Homo sapiens acornitase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
4190	16778	29226	1.48	7.0E-72	4501866	NT	Homo sapiens acornitase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
4190	16778	29227	1.48	7.0E-72	4501866	NT	Homo sapiens acornitase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
7178	19710	32558	3.23	7.0E-72	S41694.1	NT	(pseudogene) PTMAP2=prathymosin alpha [human, Genomic, 1182 nt, segment 2 of 3]
12338	24621		1.9	7.0E-72	F26259.1	EST_HUMAN	HSPD13670 HM3 Homo sapiens cDNA clone s4000051G02
8324	20865		4.31	6.0E-72	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
67	12746	25223	1.56	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
67	12746	25224	1.56	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
68	12746	25223	10.23	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
68	12746	25224	10.23	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
1178	13780		2.72	5.0E-72	L11645.1	NT	Homo sapiens alpha-tubulin mRNA, complete cds
7030	18564	32391	1.36	5.0E-72	AU128584.1	EST_HUMAN	AU128584 NT2RP2 Homo sapiens cDNA clone NT2RP2003751 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8711	21250	34173	3.16	5.0E-72	AW161274.1	EST_HUMAN	ai80c03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782584 5' similar to
8871	22368	35346	0.62	5.0E-72	AV724632.1	EST_HUMAN	TR-Q99785 Q99785 HYPOTHETICAL 32.4 KD PROTEIN ;contains element MSR1 repetitive element ;
11122	23630	36872	3.44	5.0E-72	BF331571.1	EST_HUMAN	AV724632 HTB Homo sapiens cDNA clone HTBAKB01 5'
11122	23630	36873	3.44	5.0E-72	BF331571.1	EST_HUMAN	MR4-BT05588-010600-005-d05 BT05588 Homo sapiens cDNA
11500	23949	37018	1.62	5.0E-72	BE208545.1	EST_HUMAN	MR4-BT05588-010600-005-d05 BT05588 Homo sapiens cDNA
11500	23949	37019	1.62	5.0E-72	BE208545.1	EST_HUMAN	bs08g08.y1 NH_MGC_7 Homo sapiens cDNA clone IMAGE:2823806 5'
11895	25047		2.88	5.0E-72	BE208545.1	EST_HUMAN	bs08g08.y1 NH_MGC_7 Homo sapiens cDNA clone IMAGE:2823806 5'
4948	17323		1.21	4.0E-72	11034944	NT	QV1-BT0632-280800-342-a10 BT0632 Homo sapiens cDNA
5422	17879	30387	1.05	4.0E-72	AB033104.1	NT	Homo sapiens hypothetical protein dJ1057820.2 (DJ1057820.2), mRNA
5658	18263	30761	0.72	4.0E-72	AF170025.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
6874	19270	32075	0.81	4.0E-72	T87847.1	EST_HUMAN	Homo sapiens zinc finger protein ZFP-95 (ZFP95) mRNA, alternatively spliced, complete cds
7439	19893	32829	3.01	4.0E-72	5728887	NT	y483a01.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:115752 5' similar to
8689	22188	35171	1.64	4.0E-72	8823668	NT	SP-A44282 A44282 RETROVIRUS-RELATED POLYPROTEIN - HUMAN ;
							Homo sapiens hcd domain and RLD 2 (HERC2), mRNA
							Homo sapiens hypothetical protein FLJ20758 (FLJ20758), mRNA
10318	22812	35807	0.98	4.0E-72	AJ248786.1	EST_HUMAN	q487c02.x1 Soares fetal liver spleen 1NFLS S1 Homo sapiens cDNA clone IMAGE:1849730 3' similar to
11402	23853	36818	7.8	4.0E-72	H79421.1	EST_HUMAN	TR-Q14488 Q14488 SPLICING FACTOR. (1) ;contains Alu repetitive element;contains element L1 repetitive element ;
11528	23976	37046	2.48	4.0E-72	T81910.1	EST_HUMAN	y428a03.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:235084 5'
							y428a08.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:109649 3'
12263	24473	30833	4.5	4.0E-72	AJ277546.2	NT	Homo sapiens WEE1 gene for protein kinase and partial ZNF143 gene for zinc finger transcription factor
22	12701	25157	3.55	3.0E-72	5031976	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
838	13649		1.46	3.0E-72	AA723823.1	EST_HUMAN	ah63a08.s1 Soares testis NHT Homo sapiens cDNA clone 1310280 3'
1198	13787	26307	7.76	3.0E-72	U16306.1	NT	Human chondroitin sulfate proteoglycan versican V0 splice-variant precursor peptide mRNA, complete cds
1198	13787	26308	7.76	3.0E-72	U16306.1	NT	Human chondroitin sulfate proteoglycan versican V0 splice-variant precursor peptide mRNA, complete cds
1235	13834	26348	1.33	3.0E-72	U80228.1	NT	Human gamma-aminobutyric acid transaminase mRNA, partial cds
1235	13834	26349	1.33	3.0E-72	U80228.1	NT	Human gamma-aminobutyric acid transaminase mRNA, partial cds
1567	14159	26880	0.86	3.0E-72	BE242181.1	EST_HUMAN	TCAAP1E1252 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP1252
3110	15725	28186	13.28	3.0E-72	AJ228043.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3

Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3317	15827	28404	2.84	3.0E-72	8023548	NT	Homo sapiens hypothetical protein FLJ20585 (FLJ20585), mRNA
3895	16494	28955	2.71	3.0E-72	S77589.1	NT	TCR V delta 2-C alpha =T-cell receptor delta and C alpha fusion gene (alternatively spliced, splice junction)
4509	17093	29540	0.94	3.0E-72	AF143892.1	NT	[human, precursor B-cell line REH, mRNA Partial, 211 nt]
4509	17093	29541	0.94	3.0E-72	AF143892.1	NT	Homo sapiens thiodioxin-like protein (TXNL) gene, exon 3
4843	17225	29678	2.89	3.0E-72	11416198	NT	Homo sapiens thiodioxin-like protein (TXNL) gene, exon 3
5711	18337		1.07	3.0E-72	4759093	NT	Homo sapiens semaphorin W (SEMAW) mRNA
6134	18748	31504	1.88	3.0E-72	AF073367.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 5
6134	18748	31505	1.88	3.0E-72	AF073367.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 5
6314	18921	31697	4.49	3.0E-72	AB029004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
6314	18921	31698	4.49	3.0E-72	AB029004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
6726	19320	32125	3.59	3.0E-72	4828987	NT	Homo sapiens ribosomal protein L3-like (RPL3L) mRNA
7595	20100	32875	1.92	3.0E-72	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (nrip) and survival motor neuron protein (smn) genes, complete cds
8110	20557	33568	1.52	3.0E-72	5031892	NT	Homo sapiens nuclear receptor subfamily 1, group H, member 3 (NR1H3), mRNA
10328	22822	35818	1.67	3.0E-72	X98286.1	NT	Homo sapiens S100A12 gene for Calgranulin C, exon 2 and joined cds
12174	24413	30948	2.03	3.0E-72	AB011389.1	NT	Homo sapiens gene for AF-4, complete cds
6113	18729	31482	1.41	2.0E-72	11428871	NT	Homo sapiens solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 2 (SLC13A2), mRNA
9025	21562	34490	0.78	2.0E-72	BF308560.1	EST_HUMAN	601890419F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131461 5'
9025	21562	34491	0.78	2.0E-72	BF308560.1	EST_HUMAN	601890419F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131461 5'
10610	23151	36183	2.52	2.0E-72	AA789277.1	EST_HUMAN	q28b09 s1 Scores_testis_NHT Homo sapiens cDNA clone 1391609 3' similar to gb.X02087 H. sapiens mRNA for 7SL RNA pseudogene (HUMAN);
12280	24470	30530	4.78	2.0E-72	AF182714.1	NT	Rattus norvegicus putative phosphatidylethanolamine transferase translocator mRNA, complete cds
2120	14898	27267	1.03	1.0E-72	AA846225.1	EST_HUMAN	ab3402.s1 Scores_papillary_tumor_Nht-HPA Homo sapiens cDNA clone IMAGE:1387385 3'
5940	18580	31289	4.04	1.0E-72	7657878	NT	Homo sapiens vacuolar protein sorting 41 (yeast homolog) (VPS41), mRNA
6878	19272	32078	1.18	1.0E-72	11321578	NT	Homo sapiens myosin, heavy polypeptide 13, skeletal muscle (MYH13), mRNA
6878	19272	32077	1.18	1.0E-72	11321578	NT	Homo sapiens myosin, heavy polypeptide 13, skeletal muscle (MYH13), mRNA
6744	24768	32143	1.3	1.0E-72	AV751818.1	EST_HUMAN	Homo sapiens myosin, heavy polypeptide 13, skeletal muscle (MYH13), mRNA
7633	20146	33026	3.81	1.0E-72	BE175434.1	EST_HUMAN	AV751818.NPD Homo sapiens cDNA clone HT0578 Homo sapiens cDNA
7633	20145	33027	3.81	1.0E-72	BE175434.1	EST_HUMAN	RC4-HT0578-170300-012-g02 HT0578 Homo sapiens cDNA
9510	22018	34988	7.2	1.0E-72	AF222742.1	NT	Homo sapiens synaptic glycoprotein SC2 (SC2) mRNA, complete cds
9510	22010	34988	7.2	1.0E-72	AF222742.1	NT	Homo sapiens synaptic glycoprotein SC2 (SC2) mRNA, complete cds
1508	14100	28637	1.28	9.0E-73	AW374988.1	EST_HUMAN	MFR0-CT0063-071099-002-h11 CT0063 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6180	18800	31570	0.98	9.0E-73	11525983	NT	Homo sapiens membrane protein, palmitoylated 3 (MAGLJK p55 subfamily member 3) (MPP3), mRNA
10829	23350		27.89	9.0E-73	11424069	NT	Homo sapiens ribosomal protein L13a (RPL13A), mRNA
1078	13680	26190	1.62	8.0E-73	AW071755.1	EST_HUMAN	w55506.x1 NC1_CGAP_Bn25 Homo sapiens cDNA clone IMAGE:2501068 3' similar to TR-Q60050
3332	15942	28417	0.61	8.0E-73	11435180	NT	Q98050 HYPOTHETICAL PROTEIN MJ1858.;
5788	18394	31108	0.76	8.0E-73	4505798	NT	Homo sapiens gephyrin (GPH), mRNA
6887	19283	32086	4.21	8.0E-73	11428469	NT	Homo sapiens phosphatidylinositol 3-kinase, class 2, alpha polypeptide (PIK3C2A) mRNA
8039	20581	33468	2.58	8.0E-73	AF113129.1	NT	Homo sapiens lysocysteine homolog (LOC57151), mRNA
							Homo sapiens vacuolar ATPase isoform VA68 mRNA, complete cds
9275	21801	34751	5.4	8.0E-73	BE018900.1	EST_HUMAN	bb02a06.y1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3030034 5' similar to gb:XD4088_cds1 ACTIN, CYTOPLASMIC 2 (HUMAN); gb:M21495 Mouse cytoskeletal gamma-actin mRNA, complete cds (MOUSE);
9855	22154	35123	1.83	8.0E-73	11526037	NT	Homo sapiens interleukin 12 receptor, beta 1 (L12RB1), mRNA
9855	22154	35124	1.83	8.0E-73	11526037	NT	Homo sapiens interleukin 12 receptor, beta 1 (L12RB1), mRNA
12324	24511	30819	7.07	8.0E-73	11418189	NT	Homo sapiens interleukin 12 receptor, beta 1 (L12RB1), mRNA
1173	13775	26285	1.37	7.0E-73	8823280	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (GZ2P1), mRNA
3340	15950	28428	1.27	7.0E-73	AL163208.2	NT	Homo sapiens hypothetical protein FLJ20309 (FLJ20309), mRNA
							Homo sapiens chromosome 21 segment HS21C008
4298	18884	28329	2.58	7.0E-73	AF019413.1	NT	Homo sapiens HLA class III region containing tenascin X (tenascin-X) gene, partial cds; cytochrome P450 21-hydroxylase (CYP21B), complement component C4 (C4B) G11, helicase (SK12W), RD, complement factor B (Bf), and complement component C2 (C2) genes, >
5078	17652		1.64	7.0E-73	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
169	12832		2.14	6.0E-73	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
7224	19755	32610	3.52	6.0E-73	BE166574.1	EST_HUMAN	QV0-HT0404-020300-137-403 HT0404 Homo sapiens cDNA
5460	18095	30413	1.78	4.0E-73	11422159	NT	Homo sapiens HELG protein (FAM44A1), mRNA
1802	14487	27048	1.78	3.0E-73	11435913	NT	Homo sapiens heme-binding protein (HEBP), mRNA
1802	14487	27049	1.78	3.0E-73	11435913	NT	Homo sapiens heme-binding protein (HEBP), mRNA
6789	18390	32205	1.03	3.0E-73	AA138403.1	EST_HUMAN	Homo sapiens heme-binding protein (HEBP), mRNA
8883	21232	34152	0.63	3.0E-73	AV729428.1	EST_HUMAN	zr6504.s1 Stratiotes fetal retina 837202 Homo sapiens cDNA clone IMAGE:565950 3' similar to gb:Z23064_cds1 HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN G (HUMAN);
8883	21232	34153	0.63	3.0E-73	AV729428.1	EST_HUMAN	AV729428 HTC Homo sapiens cDNA clone HTCAAF071 5'
11478	23928		1.58	3.0E-73	AI004040.1	EST_HUMAN	AV729428 HTC Homo sapiens cDNA clone HTCAAF071 5'
12579	24675		1.34	3.0E-73	AL163246.2	NT	cu11002.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1625955 3'
12583	24677		1.67	3.0E-73	AW898081.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
884	13488	26016	2.4	2.0E-73	AF139867.1	NT	RC3-NIN0088-270400-011-c04 NN0088 Homo sapiens cDNA
							Homo sapiens BAS1 (BASS1) mRNA, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1889	14571		2.46	2.0E-73	AW88081.1	EST_HUMAN	RC3-NIN0068-270400-011-c04 NN0068 Homo sapiens cDNA
3215	15827	28305	2.05	2.0E-73	4502582	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3604	16208	28688	0.68	2.0E-73	7689539	NT	Homo sapiens Parkinson disease (autosomal recessive, juvenile) 2, parkin (PARK2), transcript variant 3, mRNA
3604	16208	28687	0.68	2.0E-73	7689539	NT	Homo sapiens Parkinson disease (autosomal recessive, juvenile) 2, parkin (PARK2), transcript variant 3, mRNA
6807	18204	32011	6.35	2.0E-73	AB046811.1	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
6801	18382	32207	1.52	2.0E-73	11431471	NT	Homo sapiens interleukin 4 receptor (IL4R), mRNA
6801	18382	32208	1.52	2.0E-73	11431471	NT	Homo sapiens interleukin 4 receptor (IL4R), mRNA
9451	21877	34828	0.68	2.0E-73	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
9451	21877	34829	0.68	2.0E-73	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
10320	22814	35810	1.48	2.0E-73	4504168	NT	Homo sapiens glutathione synthetase (GSS) mRNA
10391	22885	35890	1.18	2.0E-73	11493880	NT	Homo sapiens supervillin (SVIL), transcript variant 1, mRNA
10391	22885	35881	1.18	2.0E-73	11493880	NT	Homo sapiens supervillin (SVIL), transcript variant 1, mRNA
10833	23451	36472	3.48	2.0E-73	4557812	NT	Homo sapiens galactosylceramidase (Krabbe disease) (GALC), mRNA
10833	23451	36473	3.48	2.0E-73	4557812	NT	Homo sapiens galactosylceramidase (Krabbe disease) (GALC), mRNA
10862	23477	36502	1.85	2.0E-73	AB028982.1	NT	Homo sapiens mRNA for KIAA1059 protein, partial cds
12096	14571		2.75	2.0E-73	AW88081.1	EST_HUMAN	RC3-NIN0068-270400-011-c04 NN0068 Homo sapiens cDNA
12665	24735	30825	1.41	2.0E-73	AB028016.1	NT	Homo sapiens mRNA for KIAA1093 protein, partial cds
1818	14408	28853	1.74	1.0E-73	AU121585.1	EST_HUMAN	AU121585 MAMMA1 Homo sapiens cDNA clone MAMMA1000460 5'
2626	15089	27661	0.97	1.0E-73	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
6500	19100	31885	1.05	1.0E-73	BE151283.1	EST_HUMAN	CM1-HT0282-111199-042-h10 HT0282 Homo sapiens cDNA
							qq61807.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1839637 5' similar to contains element MER22 repetitive element
9419	21928	34874	1.41	1.0E-73	A1147427.1	EST_HUMAN	601276071F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3817105 5'
11325	23023	36032	3.83	1.0E-73	BE385477.1	EST_HUMAN	Homo sapiens CD39-like 4 (CD39L4) mRNA
770	13389	26888	2.42	8.0E-74	4557428	NT	Ca2+/calmodulin-dependent protein kinase IV kinase isoform [rats, brain, mRNA, 3428 nt]
6073	18680	31435	1.87	8.0E-74	S83194.1	NT	Ca2+/calmodulin-dependent protein kinase IV kinase isoform [rats, brain, mRNA, 3428 nt]
6073	18680	31436	1.87	8.0E-74	S83194.1	NT	Ca2+/calmodulin-dependent protein kinase IV kinase isoform [rats, brain, mRNA, 3428 nt]
1982	14574	27133	3.28	7.0E-74	AJ001689.1	NT	Homo sapiens NKX2D gene, exon 10
3371	15978	28456	1.18	7.0E-74	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C048
9167	21744	34887	2.49	7.0E-74	BE967432.1	EST_HUMAN	601849284F1 NIH_MGC_73 Homo sapiens cDNA clone IMAGE:3932887 5'
12323	24510	30918	6.87	7.0E-74	BE288305.1	EST_HUMAN	601191827F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3535855 5'
							Homo sapiens S184 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
1161	13764	28276	4.55	6.0E-74	AF108907.1	NT	

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1688	14281	26784	0.9	6.0E-74	AW263177.1	EST_HUMAN	3x78q07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2700636 3'
2355	14826	27489	10.83	6.0E-74	BE388260.1	EST_HUMAN	601283521F1 NIH_MGC 44 Homo sapiens cDNA clone IMAGE:3605453 5'
2355	14826	27500	10.83	6.0E-74	BE388260.1	EST_HUMAN	601283521F1 NIH_MGC 44 Homo sapiens cDNA clone IMAGE:3605453 5'
2889	15508	27977	1.22	6.0E-74	AW014039.1	EST_HUMAN	U1H-B10-ash-h-03-0-U1.s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2708365 3'
2889	15508	27978	1.22	6.0E-74	AW014039.1	EST_HUMAN	U1H-B10-ash-h-03-0-U1.s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2708365 3'
3775	16375	28840	1.64	6.0E-74	BE048946.1	EST_HUMAN	tr54e11.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:3132332 3'
3775	16375	28841	1.64	6.0E-74	BE048946.1	EST_HUMAN	tr54e11.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:3132332 3'
5177	17744	30172	0.85	6.0E-74	4758135	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (S.cerevisiae CHL1-like helicase) (DDX11) mRNA
5177	17744	30173	0.85	6.0E-74	4758135	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (S.cerevisiae CHL1-like helicase) (DDX11) mRNA
5568	18198	30847	3.28	6.0E-74	11056013	NT	Homo sapiens actin filament associated protein (AFAP), mRNA
938	13551	28067	1.37	5.0E-74	AW020986.1	EST_HUMAN	df17c08.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2483704 5'
2728	15281		4.42	5.0E-74	AW362756.1	EST_HUMAN	PMO-CT0289-271089-001-h07 CT0289 Homo sapiens cDNA
5603	18232	30882	1.98	5.0E-74	11425417	NT	Homo sapiens phosphatidylinositol glycan, class L (PIGL), mRNA
5681	18583	31317	11.6	5.0E-74	X89670.1	NT	H. sapiens mRNA for TPCR16 protein
6004	18824	31359	8.99	5.0E-74	4507866	NT	Homo sapiens VAMP (vesicle-associated membrane protein)-associated protein A (33kd) (VAPA) mRNA, and translated products
6067	18884	31426	2.33	5.0E-74	11431471	NT	Homo sapiens interleukin 4 receptor (IL4R), mRNA
6067	18884	31427	2.33	5.0E-74	11431471	NT	Homo sapiens interleukin 4 receptor (IL4R), mRNA
6878	18552	32377	3.35	5.0E-74	7662263	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
7880	20522	33428	3.2	5.0E-74	11345483	NT	Homo sapiens hypothetical protein FLJ13222 (FLJ13222), mRNA
10614	23147	36158	1.99	5.0E-74	Y08420.1	NT	H. sapiens mRNA for HIP-1
10614	23147	36159	1.96	5.0E-74	Y08420.1	NT	H. sapiens mRNA for HIP-1
301	12956	25448	2.68	4.0E-74	D97676.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
885	13489	26017	9.19	4.0E-74	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
2005	14587	27146	2.26	4.0E-74	AB028938.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
2005	14587	27147	2.26	4.0E-74	AB028938.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
2117	14895	27263	2.03	4.0E-74	4508192	NT	Homo sapiens proteasome (prosome, macropain) subunit, beta type, 1 (PSMB1) mRNA
2117	14895	27264	2.03	4.0E-74	4508192	NT	Homo sapiens proteasome (prosome, macropain) subunit, beta type, 1 (PSMB1) mRNA
2178	14755	27325	1.21	4.0E-74	AB032894.1	NT	Homo sapiens mRNA for KIAA1168 protein, partial cds
2471	15038	27606	0.89	4.0E-74	AJ006978.1	NT	Homo sapiens PLP gene

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3127	15741	28210	4.58	4.0E-74	AJ006976.1	NT	Homo sapiens PLP gene
3580	16184	28686	1.14	4.0E-74	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
4136	16728	28181	1.01	4.0E-74	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
4855	17237	28682	1.71	4.0E-74	7882183	NT	Homo sapiens KIAA0568 gene product (KIAA0568), mRNA
4720	17301	29746	0.79	4.0E-74	Z17227.1	NT	Homo sapiens mRNA for transmembrane receptor protein
5168	17737	30164	0.81	4.0E-74	AB040609.1	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
8486	21025		21.13	3.0E-74	AA300378.1	EST_HUMAN	EST13131 Thymus tumor III Homo sapiens cDNA 5' end similar to similar to ribosomal protein L37
8510	21049	33971	0.47	3.0E-74	5986912	NT	Homo sapiens actin-related protein 3-beta (ARP3BETA), mRNA
8294	21894	34841	2.47	3.0E-74	M78984.1	EST_HUMAN	EST01132 Subtracted Hippocampus, Striatum (cat. #936205) Homo sapiens cDNA clone HHCPFR1
10241	22738	35728	2.42	3.0E-74	AA601493.1	EST_HUMAN	no1g05.s1 NC1_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100984 3'
983	13605	28119	172.8	2.0E-74	7689491	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
983	13605	28120	172.8	2.0E-74	7689491	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
1217	13817	26332	0.92	2.0E-74	AF020082.1	NT	Human endogenous retrovirus HERV-K-147D
1287	13882	28407	1.64	2.0E-74	AB50528.1	EST_HUMAN	ws51607.x1 NC1_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2547204 3' similar to SW:GG85_HUMAN
1639	14231	28784	4.17	2.0E-74	4885198	NT	Q08379 GOLGIN-96, contains element MER22 repetitive element ;
1639	14231	28785	4.17	2.0E-74	4885198	NT	Homo sapiens epidermal growth factor receptor (avian erythroblastic leukemia viral (v-erb-b) oncogene homolog) (EGFR) mRNA
5149	17719	30149	2.97	2.0E-74	AL355082.1	NT	Homo sapiens epidermal growth factor receptor (avian erythroblastic leukemia viral (v-erb-b) oncogene homolog) (EGFR) mRNA
5149	17719	30150	2.97	2.0E-74	AL355082.1	NT	Novel human gene mapping to chromosome 22
5155	17725	30156	3.93	2.0E-74	J02983.1	NT	Novel human gene mapping to chromosome 22
5898	24752	31322	1.72	2.0E-74	BE711134.1	EST_HUMAN	Human platelet glycoprotein IIb mRNA, 3' end
6055	24755	31412	2.03	2.0E-74	11439587	NT	RO8-HT0878-220500-011-C03 HT0878 Homo sapiens cDNA
6055	24755	31413	2.03	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
6120	24755	31412	2.72	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
6120	24755	31413	2.72	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
7180	19682	32538	1.3	2.0E-74	BF030788.1	EST_HUMAN	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
7881	20423	33331	1.56	2.0E-74	AB037816.1	NT	601557524F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3827549 5'
9304	21904	34853	7.76	2.0E-74	AL163204.2	NT	Homo sapiens mRNA for KIAA1395 protein, partial cds
12033	24323	30882	3.9	2.0E-74	AA198181.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C004
12605	24689	30882	1.99	2.0E-74	BF666568.1	EST_HUMAN	z096a06.s1 Striatum muscle 937209 Homo sapiens cDNA clone IMAGE:4278559 5'
57	12737	26207	2.04	1.0E-74	7657334	NT	602121428F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4278559 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
359	13008	25401	4.11	1.0E-74	AW818405.1	EST_HUMAN	QV4-ST0234-181189-037-405 ST0234 Homo sapiens cDNA
525	13157	25639	0.92	1.0E-74	8922829	NT	Homo sapiens hypothetical protein FLJ11028 (FLJ11028), mRNA
532	13163	25844	10.17	1.0E-74	X02344.1	NT	Homo sapiens beta 2 gene
627	13254	25728	1.88	1.0E-74	4508020	NT	Homo sapiens zinc finger protein 259 (ZNF259) mRNA
1037	13647	26159	2.13	1.0E-74	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2288	14842	27419	3.73	1.0E-74	AB002050.1	NT	Homo sapiens DNA for Human P2M, complete cds
3173	15786	28258	2.7	1.0E-74	475897	NT	Homo sapiens menke disease, alpha, class 2A, member 1 (MAN2A1), mRNA
3894	16582	29064	0.63	1.0E-74	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
3894	16582	29065	0.63	1.0E-74	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4040	16638	29106	6.11	1.0E-74	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
4137	16729	29182	0.78	1.0E-74	BE083080.1	EST_HUMAN	RC2-BT0642-270300-019-f06 BT0642 Homo sapiens cDNA
4354	16941	28383	0.75	1.0E-74	BE467788.1	EST_HUMAN	haz3H08.x1 NC1_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3213663 3' similar to WP:B0511.12
6351	17811	30326	1.87	1.0E-74	D83327.1	NT	OE17551 ;
6809	18397	32211	1.51	1.0E-74	M89914.1	NT	Homo sapiens DCRR1 mRNA, partial cds
7822	20135	33013	1.23	1.0E-74	11417877	NT	Human neurofibromin (NF1) gene, complete cds
8000	20542	33444	0.74	1.0E-74	BE549105.1	EST_HUMAN	Homo sapiens KIAA0862 protein (KIAA0862), mRNA
8000	20542	33445	0.74	1.0E-74	BE549105.1	EST_HUMAN	601070088F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3456280 5'
8740	21279	34202	7.81	1.0E-74	AF214582.1	NT	601070088F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3456280 5'
8768	21307	34230	0.61	1.0E-74	BF351851.1	EST_HUMAN	Homo sapiens tracheal epithelium enriched protein (PLUNC) gene, complete cds
10376	22870	35963	1.37	1.0E-74	11420549	NT	MFR0-HT0559-230500-021-e03 HT0559 Homo sapiens cDNA
11659	24086	37144	1.95	1.0E-74	11417858	NT	Homo sapiens hypothetical protein FLJ10783 (FLJ10783), mRNA
11746	24145		3.39	1.0E-74	11417858	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA
12400	24560		1.59	1.0E-74	AF240788.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2670	15228		4.06	8.0E-75	AF178228.1	NT	Homo sapiens DNA cytosine-5 methyltransferase 3B (DNMT3B) mRNA, complete cds
12056	24339		2.18	8.0E-75	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
5376	17835		1.01	6.0E-75	AA789285.1	EST_HUMAN	g28c06.s1 Soares testis NHT Homo sapiens cDNA clone 1391628 3' similar to TR:Q15377 Q15377 Y-CHROMOSOME RNA RECOGNITION MOTIF PROTEIN ;
8839	21378	34301	2.15	5.0E-75	BE272325.1	EST_HUMAN	601126088F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:2988865 5'
9045	21582	34511	0.62	5.0E-75	AA132611.1	EST_HUMAN	2a17e08.r1 Stragene colon (#837204) Homo sapiens cDNA clone IMAGE:587174 5'
9122	21658	34589	0.8	5.0E-75	BE561655.1	EST_HUMAN	601346909F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3687458 5'
9122	21658	34600	0.8	5.0E-75	BE561655.1	EST_HUMAN	601346909F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3687458 5'
9285	21895	34842	1.39	5.0E-75	BF680254.1	EST_HUMAN	602188616T1 NIH_MGC_49 Homo sapiens cDNA clone IMAGE:4298738 3'

Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10133	22626	35616	2.5	6.0E-75	AI638623.1	EST_HUMAN	t31c12.x1 NC1 CGAP_G08 Homo sapiens cDNA clone IMAGE:2242380 3' similar to TR:P87361 P87361
117	12786	25270	1.91	4.0E-75	BE081333.1	EST_HUMAN	HYPOTHETICAL 20.1 KD PROTEIN ;
484	13117		1.21	4.0E-75	N38757.1	EST_HUMAN	QV1-BT0632-210200-079-402 BT0632 Homo sapiens cDNA
1802	14392	28837	1.43	4.0E-75	AW897230.1	EST_HUMAN	y60h08.r1 Soares melanocyte 2N4-IM Homo sapiens cDNA clone IMAGE:288055 5'
2874	15492	27962	5.4	4.0E-75	BE408484.1	EST_HUMAN	CMO-NN0057-150400-335-er11 NN0057 Homo sapiens cDNA
5720	18346	31048	0.71	4.0E-75	11417946	NT	601303866F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638344 5'
5720	18346	31048	0.71	4.0E-75	11417946	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
8415	19018	31801	5.28	4.0E-75	5579457	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
8856	19444	32260	1.84	4.0E-75	11417946	NT	Homo sapiens eukaryotic translation initiation factor 3, subunit 8 (110KD) (EIF3S8), mRNA
8856	19444	32281	1.84	4.0E-75	11417946	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
10565	23101	36115	8.22	4.0E-75	768505	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
1040	13650	28162	2.75	3.0E-75	AF157623.1	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
1041	13650	28162	9.08	3.0E-75	AF157623.1	NT	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
1878	14462	27019	2.94	3.0E-75	AB011163.1	NT	Homo sapiens HTRA serine protease (PRSS11) gene, complete cds
2158	14735	27308	1.47	3.0E-75	4507334	NT	Homo sapiens HTRA serine protease (PRSS11) gene, complete cds
2467	15034	27601	3.11	3.0E-75	4759153	NT	Homo sapiens mRNA for KIAA0581 protein, partial cds
3056	15872	28148	0.85	3.0E-75	AL163201.2	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
3223	15835	28313	1.12	3.0E-75	AB011163.1	NT	Homo sapiens chromosome 21 segment HS21O001
3393	16001	28480	0.83	3.0E-75	M72383.1	NT	Homo sapiens mRNA for KIAA0581 protein, partial cds
3393	16001	28481	0.83	3.0E-75	M72383.1	NT	Human calcium-dependent phospholipid-binding protein (PLA2) mRNA, complete cds
4530	17114	28558	0.87	3.0E-75	7682421	NT	Human calcium-dependent phospholipid-binding protein (PLA2) mRNA, complete cds
5367	17927		0.61	3.0E-75	AL163209.2	NT	Homo sapiens KIAA0971 protein (KIAA0971), mRNA
5458	18093	30409	1.01	3.0E-75	11420956	NT	Homo sapiens chromosome 21 segment HS21O009
5458	18093	30410	1.01	3.0E-75	11420956	NT	Homo sapiens adaptor-related protein complex 1, sigma 2 subunit (AP1S2), mRNA
6867	19601	32432	1.42	3.0E-75	11526319	NT	Homo sapiens adaptor-related protein complex 1, sigma 2 subunit (AP1S2), mRNA
6867	19601	32433	1.42	3.0E-75	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
7188	19721	32588	4.6	3.0E-75	7682209	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
7188	19721	32589	4.6	3.0E-75	7682209	NT	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
7618	20131	33006	3.35	3.0E-75	4885632	NT	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
7618	20131	33007	3.35	3.0E-75	4885632	NT	Homo sapiens Oncogene TIM (TIM) mRNA
8915	21453	34374	1.23	3.0E-75	11420804	NT	Homo sapiens Oncogene TIM (TIM) mRNA
8915	21453	34374	1.23	3.0E-75	11420804	NT	Homo sapiens snail 1 (drosophila homolog), zinc finger protein (SNAI1), mRNA

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9598	22098	35059	0.85	3.0E-75	11420222	NT	Homo sapiens Drosophila Ketch like protein (DKELCHL), mRNA
10435	22829	36838	3.75	3.0E-75	11498430	NT	Homo sapiens synuclein, alpha (non A4 component of amyloid precursor) (SNCA), mRNA
5853	18477		1.45	2.0E-75	AV734680.1	EST_HUMAN	AV734680 cDNA Homo sapiens cDNA clone cDABED02 5'
8685	21224	34144	2.43	2.0E-75	A1311783.1	EST_HUMAN	qp91e02.x1 NCI_CGAP_Kd5 Homo sapiens cDNA clone IMAGE:1915886 3' similar to TR:Q68388 Q68388 POL/ENV GENE ;
2341	14912	27485	4.05	1.0E-75	AW168135.1	EST_HUMAN	xp60d02.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2832707 3' similar to contains PTR7.t1
2973	15588	28072	3.23	1.0E-75	X52221.1	NT	PTR7 repetitive element ;
5356	17818	30331	0.57	1.0E-75	BE894192.1	EST_HUMAN	H.sapiens ERCC2 gene, exons 1 & 2 (partial)
8353	20893		13.87	1.0E-75	AA398270.1	EST_HUMAN	601437130F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3922303 5'
8349	21863	34812	4.14	1.0E-75	BF313845.1	EST_HUMAN	z57f03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:726485 3' similar to gb:M13832 40S
8349	21863	34813	4.14	1.0E-75	BF313845.1	EST_HUMAN	RIBOSOMAL PROTEIN S17 (HUMAN);
10763	23287		8.58	1.0E-75	AA684377.1	EST_HUMAN	601900284F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4129678 5'
10870	23485	30513	3.06	1.0E-75	AF223391.1	NT	601900284F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4129678 5'
11945	17918	30331	2.58	1.0E-75	BE894192.1	EST_HUMAN	sc77b08.s1 Strabagene lung (#837210) Homo sapiens cDNA clone IMAGE:888599 3'
48	12728	25191	2.19	9.0E-76	A1652848.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
48	12728	25192	2.19	9.0E-76	AF223391.1	EST_HUMAN	601437130F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3922303 5'
9815	22913	35294	62.44	9.0E-76	M12937.1	NT	wb30b10.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2307163 3' similar to TR:O75235 O75235 TRAP1 ;
154	12617	25305	9	8.0E-76	AF154830.1	NT	wb30b10.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2307163 3' similar to TR:O75235 O75235 TRAP1 ;
974	13588	28100	10.38	8.0E-76	4504374	NT	Human ferritin Heavy subunit mRNA, complete cds
974	13588	28101	10.38	8.0E-76	4504374	NT	Homo sapiens carbamyl phosphate synthetase I mRNA, complete cds
2835	15551	28028	1.25	8.0E-76	4504374	NT	Homo sapiens H factor 1 (complement) (HF1) mRNA
6319	18028	31703	5.69	8.0E-76	7706724	NT	Homo sapiens H factor 1 (complement) (HF1) mRNA
7500	20022	32885	1.84	8.0E-76	11421442	NT	Homo sapiens mediator (Sur2), mRNA
7567	20084	32886	0.94	8.0E-76	11435215	NT	Homo sapiens LIM domain kinase 1 (LIMK1), mRNA
8237	20778	33688	0.81	8.0E-76	11418212	NT	Homo sapiens serine/threonine kinase 2 (STK2), mRNA
10280	22775	35784	1.25	8.0E-76	M13792.1	NT	Homo sapiens mitochondrial carrier family protein (LOC55972), mRNA
10546	23083	36087	7.28	8.0E-76	10442821	NT	Homo sapiens AIM-1 protein (LOC51151), mRNA
12305	24501		2.28	8.0E-76	11417862	NT	Human adenosine deaminase (ADA) gene, complete cds
							Homo sapiens baculoviral IAP repeat-containing 8 (BIRC8), mRNA
							Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA

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Table 4
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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
808	13425	25831	2.84	7.0E-78	5016082	NT	Homo sapiens dihydrolipoamide dehydrogenase (E3 component of pyruvate dehydrogenase complex, 2-oxo-glutarate complex, branched chain keto acid dehydrogenase complex) (DLD) mRNA
3333	15943	28418	3.23	7.0E-78	AF058480.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
3339	15949	28425	5.78	7.0E-78	4505052	NT	Homo sapiens lymphocyte antigen 75 (LY75) mRNA, and translated products
3378	15988	28467	1.88	7.0E-78	4757915	NT	Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 1; cyclin D-related (CBFA2T1) mRNA
4481	17047	29490	6.32	7.0E-78	4507184	NT	Homo sapiens sepiapterin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase) (SPR) mRNA
4481	17047	29491	6.32	7.0E-78	4507184	NT	Homo sapiens sepiapterin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase) (SPR) mRNA
1277	13872		30.59	6.0E-78	BE396253.1	EST_HUMAN	601312010F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3658757 5'
11340	23038	36047	2.97	6.0E-78	BE273201.1	EST_HUMAN	601142253F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3509028 5'
1888	14568	27128	8.39	5.0E-78	D83874.1	NT	Human mRNA for HMG-1, complete cds
1888	14568	27128	8.39	5.0E-78	D83874.1	NT	Human mRNA for HMG-1, complete cds
1888	14568	27130	8.39	5.0E-78	D83874.1	NT	Human mRNA for HMG-1, complete cds
3242	15854	28336	0.88	4.0E-78	BE814096.1	EST_HUMAN	QV3-BN0047-270700-283-g06 BN0047 Homo sapiens cDNA
5474	18108	30427	1.22	4.0E-78	BE783412.1	EST_HUMAN	601471725F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3874470 5'
9837	22432	35407	5.79	4.0E-78	D81825.1	EST_HUMAN	HUM178301B Human fetal brain (Tfujware) Homo sapiens cDNA clone GEN-178G01 5'
9837	22432	35408	5.79	4.0E-78	D81825.1	EST_HUMAN	HUM178301B Human fetal brain (Tfujware) Homo sapiens cDNA clone GEN-178G01 5'
657	13280	25758	1.63	3.0E-78	BF516282.1	EST_HUMAN	U1-H-BW1-anz-b-04-0-U1.s1 NCI_OGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083862 3'
657	13280	25760	1.63	3.0E-78	BF516282.1	EST_HUMAN	U1-H-BW1-anz-b-04-0-U1.s1 NCI_OGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083862 3'
1843	14235	28768	7.45	3.0E-78	4503478	NT	Homo sapiens eukaryotic translation elongation factor 1 beta 2 (EEF1B2) mRNA
1843	14235	28770	7.45	3.0E-78	4503478	NT	Homo sapiens eukaryotic translation elongation factor 1 beta 2 (EEF1B2) mRNA
3478	16082	28555	5.2	3.0E-78	BF375688.1	EST_HUMAN	RC5-ST0300-180100-033-A03 ST0300 Homo sapiens cDNA
3478	16082	28556	5.2	3.0E-78	BF375688.1	EST_HUMAN	RC5-ST0300-180100-033-A03 ST0300 Homo sapiens cDNA
5447	18018	37140	2.41	3.0E-78	Z41314.1	EST_HUMAN	HSC2QD042 normalized infant brain cDNA Homo sapiens cDNA clone c-zq04 3'
5908	18530	31255	1.08	3.0E-78	AA180611.1	EST_HUMAN	z073c07.1 Stragene pancreas (#637208) Homo sapiens cDNA clone c-zq04 3'
6508	19108	31891	7.48	3.0E-78	AF286508.1	NT	gb:132878 MIXED LINEAGE KINASE 1 (HUMAN);
8091	20632	33545	1.03	3.0E-78	N42871.1	EST_HUMAN	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
9832	22132	35097	2.91	3.0E-78	AW288933.1	EST_HUMAN	Yy20g10.1 Soares melanocyte 2kbHM Homo sapiens cDNA clone IMAGE:271842 5'
9656	22155	35125	1.11	3.0E-78	AA442309.1	EST_HUMAN	xs48h01.x1 NCI_OGAP_Kd11 Homo sapiens cDNA clone IMAGE:2773009 3'
9656	22155	35126	1.11	3.0E-78	AA442309.1	EST_HUMAN	xs48h01.x1 NCI_OGAP_Kd11 Homo sapiens cDNA clone IMAGE:2773009 3'
11849	24884	30708	1.73	3.0E-78	AW967884.1	EST_HUMAN	z64d111.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:757481 5'
11780	25080	30501	4.85	3.0E-78	AW968455.1	EST_HUMAN	z64d111.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:757481 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
303	12858	25448	1.1	2.0E-76	D84285.1	NT	Human mRNA for possible protein TPRDII, complete cds
384	13013	25485	2.12	2.0E-76	D84285.1	NT	Human mRNA for possible protein TPRDII, complete cds
384	13013	25488	2.12	2.0E-76	D84285.1	NT	Human mRNA for possible protein TPRDII, complete cds
488	13119			1.12	4557662	NT	Human sapiens immunoglobulin (CD78A) binding protein 1 (IGBP1) mRNA
616	13243	25717	1.45	2.0E-76	4503944	NT	Human sapiens glucagon (GCG) mRNA
1068	13673	26188	1.57	2.0E-76	4758053	NT	Human sapiens cAMP responsive element binding protein 1 (CREB1) mRNA
1583	14178	26708	0.89	2.0E-76	4504028	NT	Human sapiens GM2 ganglioside activator protein (GM2A) mRNA
1583	14178	26709	0.89	2.0E-76	4504028	NT	Human sapiens GM2 ganglioside activator protein (GM2A) mRNA
1872	14556	27113	1.04	2.0E-76	AA253954.1	EST_HUMAN	z680h1.1 Strategies schizo brain S11 Homo sapiens cDNA clone IMAGE:701925 3'
2887	15485	27858	2.64	2.0E-76	P23268	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN F5
3336	15946	28422	2.3	2.0E-76	AA445992.1	EST_HUMAN	z644e02.s1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:780888 3' similar to SW:ITB5_HUMAN
3336	15946	28423	2.3	2.0E-76	AA445992.1	EST_HUMAN	P18084 INTEGRIN BETA-5 SUBUNIT PRECURSOR. ;
3832	18431	28883	0.7	2.0E-76	AA400700.1	EST_HUMAN	z644e02.s1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:780888 3' similar to SW:ITB5_HUMAN
4215	12858	25448	0.62	2.0E-76	D84285.1	NT	Human mRNA for possible protein TPRDII, complete cds
5082	17655	30088	7.33	2.0E-76	AW879818.1	EST_HUMAN	QV9-OT0028-220300-132-511 OT0028 Homo sapiens cDNA
5512	18145		0.88	2.0E-76	AF127845.1	NT	Gorilla gorilla olfactory receptor (GGO18) gene, partial cds
5803	18428	31147	4.95	2.0E-76	AB028004.1	NT	Human sapiens mRNA for KIAA1081 protein, partial cds
7442	18868	32833	0.72	2.0E-76	11421328	NT	Human sapiens KIAA0783 gene product (KIAA0783), mRNA
7658	20170	33057	1.84	2.0E-76	11427410	NT	Human sapiens TPCR88 protein (HSTPCR88P), mRNA
10182	22877	35870	7.63	2.0E-76	11437211	NT	Human sapiens similar to ribosomal protein S28 (H. sapiens) (LOC83150), mRNA
10801	23324	36334	2.78	2.0E-76	7548807	NT	Human sapiens HIRA interacting protein 4 (hira-like) (HIRIP4), mRNA
4385	16972	28420	4.17	1.0E-76	D63874.1	NT	Human mRNA for HMG-1, complete cds
4385	16972	28421	4.17	1.0E-76	D63874.1	NT	Human mRNA for HMG-1, complete cds
5839	18288	30741	5.55	1.0E-76	BE796537.1	EST_HUMAN	Human mRNA for HMG-1, complete cds
6391	18894		0.7	1.0E-76	AA333207.1	EST_HUMAN	801588886F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944302 5'
7003	18501	32320	4.41	9.0E-77	BE888525.1	EST_HUMAN	EST737301 Embryo, 8 week 1 Homo sapiens cDNA 5' end
11115	23825	36887	1.68	9.0E-77	4508022	NT	601512435F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3813737 5'
12474	24588		1.9	9.0E-77	BE410354.1	EST_HUMAN	Homo sapiens protein phosphatase 2, regulatory subunit B (B56), gamma isoform (PPP2R5C) mRNA
200	12860	25344	1.36	8.0E-77	R83144.1	EST_HUMAN	801302333F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636753 5'
							yp11h02.1 Scores breast 3N4H184 Homo sapiens cDNA clone IMAGE:187155 5' similar to
							SP-ANKB_HUMAN Q01484 ANKYRIN, BRAIN VARIANT 1;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4620	17203	26652	1.27	8.0E-77	BF205181.1	EST_HUMAN	601866826F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4109503 5'
5644	18273	30747	2.93	8.0E-77	4506230	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 7 (Mox34 homolog) (P-SMD7) mRNA
11264	23792	36849	2.67	8.0E-77	AA019770.1	EST_HUMAN	z633602.L1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:363578 5'
11264	23792	36850	2.67	8.0E-77	AA019770.1	EST_HUMAN	z633602.L1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:363578 5'
12451	24585	30916	21.88	8.0E-77	R00245.1	EST_HUMAN	ye69004.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:123007 3' similar to contains MER10 repetitive element:
1973	14557	27114	2.58	7.0E-77	AA625755.1	EST_HUMAN	z681901.s1 Soares testis NHT Homo sapiens cDNA clone IMAGE:745392 3'
2456	15022	27593	1.98	7.0E-77	4505944	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide E (25kD) (POLR2E) mRNA
2455	15022	27594	1.98	7.0E-77	4505944	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide E (25kD) (POLR2E) mRNA
284	12840	25428	3.82	6.0E-77	4504600	NT	Homo sapiens interferon (alpha, beta and omega) receptor 2 (IFNAR2) mRNA
1181	13783	26293	3.04	6.0E-77	AW957753.1	EST_HUMAN	EST368823 MAGE resequences, MAGE Homo sapiens cDNA
1590	14183	26716	2.97	6.0E-77	AI204086.1	EST_HUMAN	qe77h12.x1 Soares fetal lung N2HL19W Homo sapiens cDNA clone IMAGE:1745083 3'
156	12819	25307	3.77	5.0E-77	AF154830.1	NT	Homo sapiens carbamyl phosphate synthetase I mRNA, complete cds
156	12819	25308	3.77	5.0E-77	AF154830.1	NT	Homo sapiens carbamyl phosphate synthetase I mRNA, complete cds
1279	13874	26394	1.89	5.0E-77	AF154830.1	NT	7 Homo sapiens glucokinase (GCK) gene, exon 2
1404	13997	26528	1.83	5.0E-77	AF041015.1	NT	Homo sapiens disintegrin and metalloprotease domain 10 (ADAM10) mRNA
2792	15345	27914	0.98	5.0E-77	4507250	NT	Homo sapiens cullin 1 (CUL1) mRNA
3574	16178	28681	1.03	5.0E-77	4503180	NT	Homo sapiens ubiquitin specific protease 18 (USP18), mRNA
4813	17391	29842	1.08	5.0E-77	8394518	NT	Homo sapiens EGF-like repeats and discoidin I-like domains 3 (EDIL3), mRNA
4813	17391	29843	1.08	5.0E-77	5031680	NT	Homo sapiens EGF-like repeats and discoidin I-like domains 3 (EDIL3), mRNA
5071	17844	30086	2.22	5.0E-77	5031680	NT	Homo sapiens EGF-like repeats and discoidin I-like domains 3 (EDIL3), mRNA
5419	17978	30384	1.77	5.0E-77	AL043963.1	EST_HUMAN	DKFZp434G1728.t1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434G1728 5'
6879	19813	32447	0.71	5.0E-77	AA881184.1	EST_HUMAN	el33a05.s1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1407728 3' similar to contains Alu repetitive element:contains element PTR7 PTR7 repetitive element:
7366	19892	32755	0.68	5.0E-77	MT13975.1	NT	Homo sapiens protein kinase C beta-II type (PRKCB1) mRNA, complete cds
7592	19892	32755	0.75	5.0E-77	X98298.1	NT	H. sapiens mRNA for ubiquitin hydrolase
8309	20650	33773	1.07	5.0E-77	X98298.1	NT	H. sapiens mRNA for ubiquitin hydrolase
8309	20650	33774	1.07	5.0E-77	11428849	NT	Homo sapiens 3-hydroxybutyryl-Coenzyme A hydrolase (HIBCH), mRNA
9489	21945	34893	3.52	5.0E-77	11428849	NT	Homo sapiens 3-hydroxybutyryl-Coenzyme A hydrolase (HIBCH), mRNA
9489	21945	34894	3.62	5.0E-77	11421928	NT	Homo sapiens sorting nexin 5 (SNX5), mRNA
10385	22679	35872	0.51	5.0E-77	11421928	NT	Homo sapiens sorting nexin 5 (SNX5), mRNA
10385	22679	35873	0.51	5.0E-77	AB002287.1	NT	Human mRNA for KIAA0289 gene, partial cds
2015	14597	27180	1.12	3.0E-77	AB002287.1	NT	Human mRNA for KIAA0289 gene, partial cds
					5730038	NT	Homo sapiens SET domain and methyltransferase fusion gene (SETMAR) mRNA

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2015	14597	27161	1.12	3.0E-77	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
10189	22884	35875	0.82	3.0E-77	H65167.1	EST_HUMAN	y64g01.1 Weinmann Olfactory Epithelium Homo sapiens cDNA clone IMAGE:238608 5' similar to SP:S17447 S17447 PROBABLE LIGAND-BINDING PROTEIN RY2G5 -;
10189	22884	35876	0.82	3.0E-77	H65167.1	EST_HUMAN	y64g01.1 Weinmann Olfactory Epithelium Homo sapiens cDNA clone IMAGE:238608 5' similar to SP:S17447 S17447 PROBABLE LIGAND-BINDING PROTEIN RY2G5 -;
10493	22887	35884	0.51	3.0E-77	AJ017333.1	EST_HUMAN	ox31h07.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:16388973 3'
10493	22887	35885	0.51	3.0E-77	AJ017333.1	EST_HUMAN	ox31h07.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:16388973 3'
10754	23278	36291	4.39	3.0E-77	BF359817.1	EST_HUMAN	PMS-MT0078-080800-005-g03 MT0078 Homo sapiens cDNA
1398	13990	28517	1.82	2.0E-77	AV764617.1	EST_HUMAN	AV764617 MDS Homo sapiens cDNA clone MDSBTF10 5'
1479	14072	28611	3.43	2.0E-77	AW987712.1	EST_HUMAN	RC3-BN0053-170200-011-h01 BN0053 Homo sapiens cDNA
2138	14716	27288	1.24	2.0E-77	L41825.1	NT	Homo sapiens CYP17 gene, 5' end
2151	14728	27301	2.37	2.0E-77	7706315	NT	Homo sapiens CGL-79 protein (LOC51634), mRNA
2630	15471	27760	2.28	2.0E-77	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
2630	15471	27761	2.28	2.0E-77	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
4105	16689	28153	1.36	2.0E-77	BE044316.1	EST_HUMAN	hw43b05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:3040113 3' similar to SW:GAG2_HUMAN P10284 RETROVIRUS-RELATED GAG POLYPROTEIN ;
4504	17088	28638	0.85	2.0E-77	A613519.1	EST_HUMAN	hw22g02.x1 NCI_CGAP_Bn52 Homo sapiens cDNA clone IMAGE:2280468 3' similar to TR:O65245
4504	17088	28637	0.85	2.0E-77	A613519.1	EST_HUMAN	O65245 F21E10.7 PROTEIN ;
4701	17283		1.38	2.0E-77	4504068	NT	O65245 F21E10.7 PROTEIN ;
							Homo sapiens glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2) (GOT2), nuclear gene encoding mitochondrial protein, mRNA
4883	17488	28910	4.3	2.0E-77	AA653025.1	EST_HUMAN	nc88g12.s1 NCI_CGAP_P2 Homo sapiens cDNA clone IMAGE:1188838 similar to SW:RL29_HUMAN
6109	18725	31478	1.78	2.0E-77	BE288940.1	EST_HUMAN	P47914 60S RIBOSOMAL PROTEIN L28. [1] contains element MSR1 repetitive element ;
6320	18927	31704	1.68	2.0E-77	BE787143.1	EST_HUMAN	601119852F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3029436 5'
							601476802F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3878505 5'
7226	19757	32612	14.03	2.0E-77	A833003.1	EST_HUMAN	at74a09.x1 Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2377720 3' similar to TR:Q19311
8468	21008	33824	0.9	2.0E-77	A362707.1	EST_HUMAN	Q13311 TAX1-BINDING PROTEIN TXBP151. [1] ;
8447	21973	34824	4.56	2.0E-77	U50321.1	NT	q70c09.x1 NCI_CGAP_Bn25 Homo sapiens cDNA clone IMAGE:2017360 3' similar to WP:F28D11.1
9447	21973	34925	4.56	2.0E-77	U50321.1	NT	CE05765 LOW DENSITY LIPID RECEPTOR-RELATED PROTEIN ;
8908	22403	35377	0.55	2.0E-77	BF310348.1	EST_HUMAN	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 7
							Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 7
							601895183F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4124541 5'

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9008	22403	35378	0.55	2.0E-77	BF310349.1	EST_HUMAN	601895183F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4124541 5'
47	12726	25187	1.39	1.0E-77	AB033102.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
47	12726	25188	1.39	1.0E-77	AB033102.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
284	12950	25437	2.09	1.0E-77	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant, Alzheimer disease) (APP), mRNA
284	12950	25438	2.09	1.0E-77	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant, Alzheimer disease) (APP), mRNA
908	15428	26041	2.98	1.0E-77	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant, Alzheimer disease) (APP), mRNA
908	15428	26042	2.98	1.0E-77	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant, Alzheimer disease) (APP), mRNA
1963	14547	27104	1.41	1.0E-77	AW058119.1	EST_HUMAN	w63605.x1 Soares_thymus_NHFT-Homo sapiens cDNA clone IMAGE:2536180 3'
2488	15053	27625	0.99	1.0E-77	AB028024.1	NT	Homo sapiens mRNA for KIAA1101 protein, complete cds
3081	15898	28168	2.82	1.0E-77	4503300	NT	Homo sapiens 2,4-dienoyl CoA reductase 1, mitochondrial (DEOR1), mRNA
4445	17031	29472	3.85	1.0E-77	7708299	NT	Homo sapiens CGI-60 protein (LOC51628), mRNA
4822	17205	29654	20.39	1.0E-77	AJ228041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
4755	17336	28790	3.41	1.0E-77	6552322	NT	Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-exon4, mRNA
6098	17180	29627	0.99	1.0E-77	4758053	NT	Homo sapiens cAMP responsive element binding protein 1 (CREB1) mRNA
5228	17792	30211	1.05	1.0E-77	7661849	NT	Homo sapiens KIAA0005 gene product (KIAA00005), mRNA
5228	17792	30212	1.05	1.0E-77	7661849	NT	Homo sapiens KIAA0005 gene product (KIAA00005), mRNA
5367	17946		4.13	1.0E-77	AL183247.2	NT	Homo sapiens chromosome 21 segment HS21C047
6088	18702	31449	1.46	1.0E-77	AF088844.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, exons 27 and 28
6088	18702	31450	1.46	1.0E-77	AF088844.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, exons 27 and 28
6188	18808	31577	1.4	1.0E-77	M25844.1	NT	Human von Willebrand factor gene, exon 20
6575	19173	31972	1.45	1.0E-77	4885182	NT	Homo sapiens diaphanous (Drosophila, homolog) 1 (DIAPH1), mRNA
7114	19454	32270	15.68	1.0E-77	5881412	NT	Homo sapiens elastin (supraclavicular aortic stenosis, Williams-Beuren syndrome) (ELN), mRNA
7681	20173	33060	0.92	1.0E-77	11420159	NT	Homo sapiens cullin 1 (CUL1), mRNA
7740	20248	33141	0.78	1.0E-77	X04571.1	NT	Human mRNA for kidney epidermal growth factor (EGF) precursor
9188	21708	34649	1.31	1.0E-77	X94354.1	NT	H. sapiens DNA for Cone cGMP-PDE gene
9188	21708	34650	1.31	1.0E-77	X94354.1	NT	H. sapiens DNA for Cone cGMP-PDE gene
10416	22910	35909	1.01	1.0E-77	AB028398.1	NT	Homo sapiens hu-GlcAT-P mRNA for glucuronyltransferase, complete cds
10416	22910	35910	1.01	1.0E-77	AB028398.1	NT	Homo sapiens hu-GlcAT-P mRNA for glucuronyltransferase, complete cds
10956	23471	36498	2.92	1.0E-77	AB028398.1	NT	Homo sapiens meningioma expressed antigen 8 (colloid-coll proline-rich) (MCEA8), mRNA
10444	22838	35948	2.4	9.0E-78	AW753302.1	EST_HUMAN	RC3-CT0254-280889-011-905 CT0254 Homo sapiens cDNA

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6574	19172	31970	4.74	8.0E-78	AW947061.1	EST_HUMAN	RC2-ET0023-080500-012-405 ET0023 Homo sapiens cDNA
6574	19172	31971	4.74	8.0E-78	AW947061.1	EST_HUMAN	RC2-ET0023-080500-012-405 ET0023 Homo sapiens cDNA
88	12765	25248	1.48	6.0E-78	AU118789.1	EST_HUMAN	AU118789 HEMBA1 Homo sapiens cDNA clone HEMBA1004354 5'
88	12765	25249	1.48	6.0E-78	AU118789.1	EST_HUMAN	AU118789 HEMBA1 Homo sapiens cDNA clone HEMBA1004354 5'
3358	15984	28441	0.72	6.0E-78	BF344101.1	EST_HUMAN	602016826F1 NCL_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4152511 5'
6877	18273	NT	2.29	6.0E-78	11432710	NT	Homo sapiens GDNF family receptor alpha 1 (GFRA1), mRNA
234	12884	25377	4.78	5.0E-78	11422488	NT	Homo sapiens hypothetical protein FLJ11316 (FLJ11316), mRNA
2597	15159	27727	4.1	5.0E-78	AW673424.1	EST_HUMAN	bs54H03.y4 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2800405 5' similar to WP:Y4888A.6
3432	18040	28522	3.88	5.0E-78	M55586.1	NT	CE22121 ; Human collagenase type IV (CLG4) gene, exon 6
5807	18238	30888	2.29	5.0E-78	AF038538.1	NT	Homo sapiens Beas's muscular dystrophy related protein mRNA, partial cds
5764	18390	31102	24.58	5.0E-78	11416586	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA
7208	19739	32583	2.2	5.0E-78	AW953120.1	EST_HUMAN	EST385190 IMAGE resequences, MAGB Homo sapiens cDNA
9012	21549	34478	6.88	5.0E-78	U60888.1	NT	Human lysosomal alpha-mannosidase (manB) gene, exon 7
9013	21550	34479	3.6	5.0E-78	BE080836.1	EST_HUMAN	601648061F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:3931887 5'
1176	13778	26288	1.64	4.0E-78	AL043314.2	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N0323 5'
1565	14157	26888	1.99	4.0E-78	AL355941.1	NT	Novel human gene mapping to chromosome 22
2357	14928	27502	2.97	4.0E-78	AF107405.1	NT	Homo sapiens pre-mRNA splicing factor (SFRS3) mRNA, complete cds
4414	16889	29441	1.23	4.0E-78	7656878	NT	Homo sapiens synectin (LOC30816), mRNA
4887	17482	29915	1.91	4.0E-78	4505806	NT	Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA) mRNA
4987	17482	29916	1.91	4.0E-78	4505806	NT	Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA) mRNA
5941	18581	31280	0.97	4.0E-78	11420732	NT	Homo sapiens SFRS3 protein kinase 2 (SRPK2), mRNA
7502	20024	32888	0.77	4.0E-78	4508738	NT	Homo sapiens ribosomal protein S8 kinase, 70kD, polypeptide 1 (RPS8KB1) mRNA
8787	21328	34250	1.51	4.0E-78	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (pik4230) mRNA, complete cds
8787	21328	34251	1.51	4.0E-78	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (pik4230) mRNA, complete cds
9280	21880	34837	0.61	4.0E-78	11417251	NT	Homo sapiens X-ray repair complementing defective repair in Chinese hamster cells 4 (XRCCA), mRNA
10341	22835	35829	2.03	4.0E-78	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
10341	22835	35830	2.03	4.0E-78	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
10841	23173	36185	1.67	4.0E-78	11428810	NT	Homo sapiens regulatory factor X-associated ankyrin-containing protein (RFXANK), mRNA
11297	23749	36808	2.09	4.0E-78	AF169148.1	NT	Homo sapiens e-CaBP1 (CABP1) mRNA, complete cds
11432	23882	36948	4.15	4.0E-78	X05844.1	NT	Human transforming growth factor-beta precursor gene exons 4-5 (and joined mature peptide)
12337	24520	30923	4.58	4.0E-78	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
172	12835	25318	2.42	3.0E-78	AF095601.1	NT	Homo sapiens eRF1 gene, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
172	12835	25319	2.42	3.0E-78	AF085901.1	NT	Homo sapiens eRF1 gene, complete cds
3827	16427		1.16	3.0E-78	AU140604.1	EST_HUMAN	AU140604 PLACE3 Homo sapiens cDNA clone PLACE3000373 5'
4180	16488	28947	0.76	3.0E-78	4507934	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
10186	22881		5.78	3.0E-78	BE144758.1	EST_HUMAN	CWO-HT0180-041089-065-c07 HT0180 Homo sapiens cDNA
10860	23381	36400	5.65	3.0E-78	BE156318.1	EST_HUMAN	QVO-HT0387-150200-114-q08 HT0387 Homo sapiens cDNA
3155	15769		2.54	2.0E-78	U04488.1	NT	Homo sapiens type IV collagen alpha 5 chain (COL4A5) gene, exon 20
4066	16882		1.8	2.0E-78	AA311872.1	EST_HUMAN	EST182583 Jurkat T-cells V1 Homo sapiens cDNA 5' end
7483	20008	32870	1.38	2.0E-78	AW402308.1	EST_HUMAN	UI-HF-BKO-esl-q-10-0-UI.r1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3054139 5'
7483	20006	32871	1.38	2.0E-78	AW402308.1	EST_HUMAN	UI-HF-BKO-esl-q-10-0-UI.r1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3054139 5'
7714	20223	33110	3.47	2.0E-78	BF689800.1	EST_HUMAN	802186528F1 NIH_MGC_49 Homo sapiens cDNA clone IMAGE:4285598 5'
7884	20528	33432	1.73	2.0E-78	AV714177.1	EST_HUMAN	AV714177 DCB Homo sapiens cDNA clone DCBAWFD9 5'
8389	20828	33948	1.8	2.0E-78	AI557508.1	EST_HUMAN	P12.1_16_B07.r tumor2 Homo sapiens cDNA 3'
8389	20828	33949	1.8	2.0E-78	AI557508.1	EST_HUMAN	P12.1_16_B07.r tumor2 Homo sapiens cDNA 3'
10859	23474	38489	3.39	2.0E-78	AI197837.1	EST_HUMAN	q50h05.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:1859881 3' similar to WP-R80.1
11003	23517	38552	3.47	2.0E-78	N68951.1	EST_HUMAN	CE06325 PROTEIN KINASE:
5508	18141	30553	2.63	1.0E-78	11417304	NT	z448f12.61 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:295823 3'
7035	18055	30478	1.91	1.0E-78	AV848699.1	EST_HUMAN	Homo sapiens GAP-like protein (LOC51308), mRNA
8100	20641		2.25	1.0E-78	U52373.1	NT	AV848699 GLC Homo sapiens cDNA clone GLCEMCO1 3'
11832	24167	31037	2.17	1.0E-78	11430460	NT	Human sarinethreosine kinase MNB (mnb) mRNA, complete cds
11828	24261	31014	1.41	1.0E-78	11435903	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
4808	17388	28838	4.05	9.0E-79	11525891	NT	Homo sapiens similar to lymphocyte activation-associated protein (H. sapiens) (LOC83140), mRNA
4988	17562	30006	3.34	9.0E-79	BE000837.1	EST_HUMAN	Homo sapiens peptide YY (PYY), mRNA
5624	18253	30722	13.77	9.0E-79	AB028070.1	NT	RC2-BN0074-080300-014-c12 BN0074 Homo sapiens cDNA
6482	19083	31864	2.48	9.0E-79	5454145	NT	Homo sapiens mRNA for activator of S phase Kinase, complete cds
6731	19325	32128	1.43	9.0E-79	11430822	NT	Homo sapiens ubiquitin-conjugating enzyme E2E 3 (homologous to yeast UBC4/5) (UBE2E3) mRNA
7388	24761		0.98	9.0E-79	11424427	NT	Homo sapiens hypothetical protein FLJ11284 (FLJ11284), mRNA
7575	20091	32868	0.89	9.0E-79	11421735	NT	Homo sapiens hypothetical protein FLJ20345 (FLJ20345), mRNA
7575	20091	32868	0.89	9.0E-79	11421735	NT	Homo sapiens cAMP response element-binding protein CRE-BP a (H_GS165L15.1), mRNA
7612	20125	33002	0.72	9.0E-79	D30858.1	NT	Homo sapiens cAMP response element-binding protein CRE-BP a (H_GS165L15.1), mRNA
8287	20828	33748	0.58	9.0E-79	11417280	NT	Homo sapiens T-cell mRNA for glycyl tRNA synthetase, complete cds
8287	20828	33749	0.58	9.0E-79	11417280	NT	Human T-cell mRNA for glycyl tRNA synthetase (TARS), mRNA
8287	20828	33749	0.58	9.0E-79	11417280	NT	Homo sapiens threonyl-tRNA synthetase (TARS), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8893	21531	34480	7.08	9.0E-79	J02853.1	NT	Homo sapiens casein kinase II alpha subunit mRNA, complete cds
8893	21531	34481	7.08	9.0E-79	J02853.1	NT	Homo sapiens casein kinase II alpha subunit mRNA, complete cds
9302	21802	34851	0.61	9.0E-79	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
10267	22782	35749	0.59	9.0E-79	11438843	NT	Homo sapiens hypothetical protein FLJ20535 (FLJ20535), mRNA
10316	22810	35803	2.32	9.0E-79	AF062346.1	NT	Homo sapiens zinc finger protein 216 splice variant 1 (ZNF216), mRNA, complete cds
10316	22810	35804	2.32	9.0E-79	AF062346.1	NT	Homo sapiens zinc finger protein 216 splice variant 1 (ZNF216), mRNA, complete cds
10946	23482	36484	2.73	9.0E-79	AY008273.1	NT	Homo sapiens TRAF8-regulated IKK activator 1 beta Uev1A mRNA, complete cds
11388	23840	36804	3.28	9.0E-79	11423827	NT	Homo sapiens suppressor of white apricot homolog 2 (SWAP2), mRNA
11388	23840	36805	3.28	9.0E-79	11423827	NT	Homo sapiens suppressor of white apricot homolog 2 (SWAP2), mRNA
12549	24854	30900	2.05	9.0E-79	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), mRNA
3806	18405	28889	1.17	8.0E-79	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
11747	18035	30495	1.3	8.0E-79	8587387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
3281	15802	28382	10.29	7.0E-79	BE816848.1	EST_HUMAN	601472708T1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3875657 3'
11878	24095		2.07	8.0E-79	AA698829.1	EST_HUMAN	q294604.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:462558 3' similar to TR:Q15408 Q15408 NEUTRAL PROTEASE LARGE SUBUNIT ;
11368	23820	36882	3.85	5.0E-79	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
5159	17728	30157	2.24	4.0E-79	BF210869.1	EST_HUMAN	60187452F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4101245 5'
335	12887	25474	2.48	3.0E-79	AF114488.1	NT	Homo sapiens intracrin short isoform (ITSN) mRNA, complete cds
1014	13624	26139	4.44	3.0E-79	AF232708.1	NT	Homo sapiens cell-line tsA201a chloride ion current inducer protein (Cln) gene, complete cds
3133	15747	28216	1.91	3.0E-79	U09410.1	NT	Human zinc finger protein ZNF131 mRNA, partial cds
5282	17854	30278	0.94	3.0E-79	AF114488.1	NT	Homo sapiens intracrin short isoform (ITSN) mRNA, complete cds
5282	17854	30279	0.94	3.0E-79	AF114488.1	NT	Homo sapiens intracrin short isoform (ITSN) mRNA, complete cds
5584	18185	30841	8.78	3.0E-79	AF110322.1	NT	Homo sapiens MSTP018 (MST018) mRNA, complete cds
5888	18520	31245	1.72	3.0E-79	AB020689.1	NT	Homo sapiens mRNA for KIAA0892 protein, partial cds
5822	18544	31270	1.01	3.0E-79	BE789470.1	EST_HUMAN	601482143F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3884554 5'
5822	18544	31271	1.01	3.0E-79	BE789470.1	EST_HUMAN	601482143F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3884554 5'
5942	18562	31281	3.6	3.0E-79	11426770	NT	Homo sapiens netrin 1 (NTN1), mRNA
5942	18562	31282	3.6	3.0E-79	11426770	NT	Homo sapiens netrin 1 (NTN1), mRNA
6843	19433	32248	0.78	3.0E-79	BE256893.1	EST_HUMAN	601112055F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352885 5'
7120	18460	32275	3.07	3.0E-79	AB014520.1	NT	Homo sapiens mRNA for KIAA0620 protein, partial cds
7120	18460	32276	3.07	3.0E-79	AB014520.1	NT	Homo sapiens mRNA for KIAA0620 protein, partial cds
8105	20846	33555	1.58	3.0E-79	AF249273.1	NT	Homo sapiens Bcl-2-associated transcription factor short form mRNA, complete cds
8924	21838	34789	0.71	3.0E-79	10835038	NT	Homo sapiens tetratricopeptide repeat domain 3 (TTC3), mRNA
10249	22744		0.62	3.0E-79	AV698115.1	EST_HUMAN	AV698115 GK Homo sapiens cDNA clone GKCAHE11 5'

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10740	23265	36280	1.97	3.0E-79	AF249273.1	NT	Homo sapiens Bcl-2-associated transcription factor short form mRNA, complete cds
10740	23265	36281	1.97	3.0E-79	AF249273.1	NT	Homo sapiens Bcl-2-associated transcription factor short form mRNA, complete cds
309	12964		1.05	2.0E-79	H63129.1	EST_HUMAN	y48903.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:208541 3'
682	13288	25767	1.38	2.0E-79	BE378826.1	EST_HUMAN	601159415F2 NH_MGC 53 Homo sapiens cDNA clone IMAGE:3511107 5'
863	13574	28030	0.94	2.0E-79	4757841	NT	Homo sapiens BCL2-like 2 (BCL2L2) mRNA
1020	13630	26145	0.91	2.0E-79	4885234	NT	Homo sapiens Gardner-Rasheed feline sarcoma viral (v-fgr) oncogene homolog (FGR) mRNA
1020	13630	26146	0.91	2.0E-79	4885234	NT	Homo sapiens Gardner-Rasheed feline sarcoma viral (v-fgr) oncogene homolog (FGR) mRNA
1073	13678		1.08	2.0E-79	A1523747.1	EST_HUMAN	th18h07.x1 NCI CGAP_P128 Homo sapiens cDNA clone IMAGE:2118885 3'
1824	14413	28958	1.21	2.0E-79	7657024	NT	Homo sapiens Dickkopf gene 4 (DKK-4), mRNA
1824	14413	28958	1.21	2.0E-79	7657024	NT	Homo sapiens Dickkopf gene 4 (DKK-4), mRNA
1918	14503	27060	1.01	2.0E-79	7882255	NT	Homo sapiens KIAA0703 gene product (KIAA0703), mRNA
2193	14768	27341	10.78	2.0E-79	4585883	NT	Homo sapiens phosphodiesterase 8A, cGMP-specific, rod, alpha (PDE8A), mRNA
2193	14768	27342	10.78	2.0E-79	4585883	NT	Homo sapiens phosphodiesterase 8A, cGMP-specific, rod, alpha (PDE8A), mRNA
2352	14923	27498	2.42	2.0E-79	AF244138.1	NT	Homo sapiens hepatocellular carcinoma-associated antigen 88 (HCA88) mRNA, complete cds
2741	15286	27863	0.99	2.0E-79	AB023154.1	NT	Homo sapiens mRNA for KIAA0837 protein, partial cds
3985	16583	29054	0.65	2.0E-79	AJ170492.1	NT	Homo sapiens chloride channel CLCA4 (CLCA4) mRNA, complete cds
4245	16833	29284	1.24	2.0E-79	AJ271408.1	NT	Homo sapiens mRNA for Fas-associated factor, FAF1 (Faf1 gene)
4800	17378	28628	0.62	2.0E-79	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C008
							EST182828 Jurkat T-cells VI Homo sapiens cDNA 5' end similar to C. elegans hypothetical protein, cosmid B0303.15
5851	18475		1.16	2.0E-79	AA312223.1	EST_HUMAN	
5901	18523	31248	0.9	2.0E-78	11181789	NT	Homo sapiens X transporter protein 3 (XT3), mRNA
6390	18983	31773	1.1	2.0E-78	AB020637.1	NT	Homo sapiens mRNA for KIAA0830 protein, partial cds
7040	18080	30482	0.98	2.0E-79	AF263613.1	NT	Homo sapiens membrane-associated calcium-independent phospholipase A2 gamma mRNA, complete cds
7219	19750	32805	1.78	2.0E-78	7382479	NT	Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA
7219	19750	32806	1.78	2.0E-78	7382479	NT	Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA
8044	20586	33492	1.22	2.0E-79	4508442	NT	Homo sapiens retinoblastoma-like 1 (p107) (RBL1) mRNA
8454	20994	33912	2.52	2.0E-79	11427426	NT	Homo sapiens hypothetical protein FLJ11006 (FLJ11006), mRNA
8701	21240	34163	0.55	2.0E-79	8923248	NT	Homo sapiens hypothetical protein FLJ20275 (FLJ20275), mRNA
8701	21240	34164	0.55	2.0E-79	8923248	NT	Homo sapiens hypothetical protein FLJ20275 (FLJ20275), mRNA
8934	21472	34391	0.89	2.0E-79	11432184	NT	Homo sapiens similar to ATPase, H+ transporting, lysosomal (vacuolar proton pump) membrane sector associated protein MB-9 (H. sapiens) (LOC33961), mRNA
10004	22499	35488	1.94	2.0E-79	S72869.1	NT	H4(D10S170) putative cytoskeletal protein [human, thyroid, mRNA, 3011 nt]
10004	22499	35489	1.94	2.0E-79	S72869.1	NT	H4(D10S170) putative cytoskeletal protein [human, thyroid, mRNA, 3011 nt]

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10608	23427	38444	5.07	2.0E-79	BE064388.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
10608	23427	38445	5.07	2.0E-79	BE064388.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
11716	18033	30483	5.59	2.0E-79	7682357	NT	Homo sapiens KIAA0879 protein (KIAA0879), mRNA
11808	24181	31029	5.85	2.0E-79	AB020940.1	NT	Homo sapiens mRNA for KIAA0833 protein, partial cds
12038	24328	30994	2.81	2.0E-79	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
6701	24768		3.27	1.0E-79	BF363071.1	EST_HUMAN	MRO-NN0087-260600-017-b10 NN0087 Homo sapiens cDNA
6187	20728	33040	0.74	1.0E-79	BE394211.1	EST_HUMAN	601311517F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3632908 5'
11487	23036	37006	2.11	1.0E-79	BF087405.1	EST_HUMAN	QV2-HT0540-120900-359-a05 HT0540 Homo sapiens cDNA
11834	25021		1.84	1.0E-79	AI460115.1	EST_HUMAN	ar79e04.x1 Barsteed colon HPLRB7 Homo sapiens cDNA clone IMAGE:2151438 3'
3180	15783	28264	5.7	9.0E-80	AA725948.1	EST_HUMAN	al23e05.51 Soares_testis_NHT Homo sapiens cDNA clone 1343848 3'
3180	15793	28265	5.7	9.0E-80	AA725948.1	EST_HUMAN	al23e05.51 Soares_testis_NHT Homo sapiens cDNA clone 1343848 3'
9828	22422	35396	1.33	9.0E-80	BE768603.1	EST_HUMAN	601581652F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3638061 5'
11158	23683	36708	11.44	9.0E-80	11433924	NT	Homo sapiens solute carrier family 7 (cationic amino acid transporter, y ⁺ system), member 8 (SLC7A8), mRNA
11158	23683	36709	11.44	9.0E-80	11433924	NT	Homo sapiens solute carrier family 7 (cationic amino acid transporter, y ⁺ system), member 8 (SLC7A8), mRNA
3682	18284		1.19	8.0E-80	U94387.1	NT	Homo sapiens Y chromosome spermatogenesis candidate protein (RBM) pseudogene mRNA, partial cds
7800	20113	32989	2.92	8.0E-80	11422847	NT	Homo sapiens KIAA0724 gene product (KIAA0724), mRNA
7800	20113	32990	2.92	8.0E-80	11422847	NT	Homo sapiens KIAA0724 gene product (KIAA0724), mRNA
9323	21837	34787	1.07	8.0E-80	6005921	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
9323	21837	34788	1.07	8.0E-80	6005921	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
933	13546	28063	1.84	8.0E-80	AI422197.1	EST_HUMAN	if58db02.x1 NCI_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2103459 3' similar to SW:NUJEM_HUMAN Q18795 NADH-LIBUQUINONE OXIDOREDUCTASE 39 KD SUBUNIT PRECURSOR;
1685	14277	28910	2.29	8.0E-80	U84898.1	NT	Homo sapiens NRD convertase mRNA, complete cds
2337	14908	27479	2.88	8.0E-80	6631094	NT	Homo sapiens minichromosome maintenance deficient (S. cerevisiae) 3 (MCM3), mRNA
2337	14908	27480	2.88	8.0E-80	6631094	NT	Homo sapiens minichromosome maintenance deficient (S. cerevisiae) 3 (MCM3), mRNA
4372	16959	29403	0.98	8.0E-80	AB032981.1	NT	Homo sapiens mRNA for KIAA1155 protein, partial cds
4372	16959	29404	0.98	8.0E-80	AB032981.1	NT	Homo sapiens mRNA for KIAA1155 protein, partial cds
5669	18590	31325	2.15	8.0E-80	11421482	NT	Homo sapiens malate dehydrogenase 2, NAD (mitochondrial) (MDH2), mRNA
6226	18835	31608	3.16	8.0E-80	AJ404468.1	NT	Homo sapiens mRNA for dynein heavy chain (DNAH9 gene)
6376	18980	31759	4.09	8.0E-80	11436736	NT	Homo sapiens tubby like protein 3 (TULP3), mRNA
6418	18021		0.88	8.0E-80	7682393	NT	Homo sapiens KIAA0941 protein (KIAA0941), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6464	18065	31850	0.84	6.0E-80	M18533.1	NT	Homo sapiens dystrophin (DMD) mRNA, complete cds
8768	21297	34217	2.43	6.0E-80	11526464	NT	Homo sapiens G protein-coupled receptor 51 (GPR51), mRNA
8758	21297	34218	2.43	6.0E-80	11526464	NT	Homo sapiens G protein-coupled receptor 51 (GPR51), mRNA
8949	21487	34409	1.6	6.0E-80	AL163301.2	NT	Homo sapiens chromosome 21 segment HS21C101
9281	21807	34759	0.88	6.0E-80	AF161485.1	NT	Homo sapiens HSPC148 mRNA, complete cds
9775	22273	35258	1.49	6.0E-80	U20211.1	NT	Human cone photoreceptor cGMP-phosphodiesterase alpha subunit gene, exon 21
10820	23341	36356	2.68	6.0E-80	11427366	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 1 (BIG1), mRNA
11103	23613	36853	22.81	6.0E-80	AF226730.1	NT	Homo sapiens Cyf19 mRNA, complete cds
11593	24036	37105	1.93	6.0E-80	AF102265.1	NT	Homo sapiens N-acetylglucosamine-phosphate mutase mRNA, complete cds
11617	24898		1.84	6.0E-80	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12019	24316		6.01	6.0E-80	AB026900.1	NT	Homo sapiens GST gene for cerebroside sulfotransferase, exon 1, 2, 3, 4, 5
12543	25028		1.95	6.0E-80	AJ133127.1	NT	Homo sapiens mRNA for sodium-glucose cotransporter (SGLT2 gene)
614	13241	25716	2.83	5.0E-80	4506228	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 3 (PSMD3) mRNA
868	13483	25908	1.9	5.0E-80	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MN1H) mRNA, complete cds
868	13483	25908	1.9	5.0E-80	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MN1H) mRNA, complete cds
1231	13830		1.16	5.0E-80	X91047.1	NT	H. sapiens ncd1 gene (exon 12)
1503	14065		2.88	5.0E-80	AL163263.2	NT	Homo sapiens chromosome 21 segment HS21C083
2399	14967	27540	1.08	5.0E-80	U88358.1	NT	Human I3 mtd protein homolog mRNA, complete cds
2474	15041	27609	2.56	5.0E-80	AB037855.1	NT	Homo sapiens mRNA for KIAA1434 protein, partial cds
2820	15372	27641	2.87	5.0E-80	4504292	NT	Homo sapiens H3 histone family, member J (H3FJ) mRNA
4112	16706	28160	0.93	5.0E-80	AB019038.1	NT	Homo sapiens HMT-1 mRNA for beta-1,4 mannosyltransferase, complete cds
4112	16706	28161	0.93	5.0E-80	AB019038.1	NT	Homo sapiens HMT-1 mRNA for beta-1,4 mannosyltransferase, complete cds
5089	17682	30102	1.29	5.0E-80	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
8298	20839	33760	1.04	5.0E-80	F25915.1	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
9182	21759	34705	15.52	4.0E-80	AL163210.2	EST_HUMAN	HSPD13155 HM3 Homo sapiens cDNA clone e400045F03
233	12693		11.18	3.0E-80	BE817465.1	NT	Homo sapiens chromosome 21 segment HS21C010
5034	17608		6.93	3.0E-80	BE817465.1	EST_HUMAN	QV4-BN0263-040600-241-g10 BN0263 Homo sapiens cDNA
5986	18006	31340	2.04	3.0E-80	A091675.1	EST_HUMAN	cc23a12.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:1567054 3' similar to
1833	14421	26871	6.34	2.0E-80	R35321.1	EST_HUMAN	TR:O35790 O35790 PIG-L;
1900	14485	27046	1.4	2.0E-80	A1444821.1	EST_HUMAN	Y685a08.11 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:38090 5'
2100	14678	27247	5.6	2.0E-80	AL043116.2	EST_HUMAN	RET487 subtracted retina cDNA library Homo sapiens cDNA clone RET487
6393	18998	31775	0.71	2.0E-80	A1923972.1	EST_HUMAN	DKFZp434D1323_r1 434 (synonym: hba3) Homo sapiens cDNA clone DKFZp434D1323 5'

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Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6393	18386	31776	0.71	2.0E-80	A1923972.1	EST_HUMAN	w14c10.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2448788 3'
6897	18631	32469	1.08	2.0E-80	AA982952.1	EST_HUMAN	m180401.s1 NCI_CGAP_Co8 Homo sapiens cDNA clone IMAGE:1080177 3'
6893	19491	32312	1.89	2.0E-80	11421030	NT	Homo sapiens Golgi transport complex protein (80 kDa) (GTC30), mRNA
7288	18826	32685	1	2.0E-80	175215.1	EST_HUMAN	yc89f12.r1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:22851 5' similar to SP-K1CR_XENLA P08802 KERATIN, TYPE I CYTOSKELETAL ENDO B ;
9086	21822	34558	1.25	2.0E-80	AW984270.1	EST_HUMAN	EST376343 MAGE resequences, MAGE Homo sapiens cDNA
9083	22182	35156	1.13	2.0E-80	AJ007379.1	NT	Homo sapiens GGT gene, exon 6
10748	23272	36287	7.28	2.0E-80	AA383362.1	EST_HUMAN	z170f12.r1 Soares testis_NH1T Homo sapiens cDNA clone IMAGE:727727 5' similar to TR-G191315
362	13011		1.44	1.0E-80	AL163303.2	NT	G191315 ANDROGEN-DEPENDENT EXPRESSED PROTEIN ;
832	13449	25656	1.39	1.0E-80	AF231820.1	NT	Homo sapiens chromosome 21 segment HS21C103
1897	14579		3.73	1.0E-80	A1732656.1	EST_HUMAN	Homo sapiens chromosome 21 unknown mRNA
4845	17520	29962	0.71	1.0E-80	N69520.1	EST_HUMAN	m10f112.x5 NCI_CGAP_Co8 Homo sapiens cDNA clone IMAGE:1076495 3' similar to contains OFR.t1 OFR repetitive element ;
5530	18162		6.77	1.0E-80	BE386815.1	EST_HUMAN	z338g07.r1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:294972 5' similar to contains Alu repetitive element;
6126	18741	31494	5.9	1.0E-80	L10347.1	NT	801274305F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3615433 5'
6824	18221	32026	1.57	1.0E-80	5174540	NT	Human pro-alpha1 type II collagen (COL2A1) gene exons 1-54, complete cds
7258	19768	32642	1.39	1.0E-80	AJ224172.1	NT	Homo sapiens malate dehydrogenase 2, NAD (mitochondrial) (MDH2), nuclear gene encoding mitochondrial protein, mRNA
7574	20080	32968	2.64	1.0E-80	A1848731.1	EST_HUMAN	Homo sapiens mRNA for lipophilin B
7574	20080	32967	2.64	1.0E-80	A1848731.1	EST_HUMAN	wq25c05.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2472298 3'
8173	20714	33630	1.25	1.0E-80	11421211	NT	wq25c05.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2472298 3'
8634	21173	34091	0.96	1.0E-80	11421211	NT	Homo sapiens protein tyrosine phosphatase, receptor type, A (PTPRA), mRNA
8634	21173	34062	0.96	1.0E-80	11421211	NT	Homo sapiens protein tyrosine phosphatase, receptor type, A (PTPRA), mRNA
9209	21726	34668	1.79	1.0E-80	AF245219.1	NT	Homo sapiens protein tyrosine phosphatase, receptor type, A (PTPRA), mRNA
9209	21726	34669	1.79	1.0E-80	AF245219.1	NT	Homo sapiens probable mannose binding C-type lectin DC-SIGNR mRNA, complete cds
10323	22817	35813	0.93	1.0E-80	D63479.2	NT	Homo sapiens probable mannose binding C-type lectin DC-SIGNR mRNA, complete cds
10531	23068	36080	2.64	1.0E-80	11641276	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
10531	23068	36081	2.64	1.0E-80	11641276	NT	Homo sapiens similar to rat myomegalin (LOC84182), mRNA
12091	24359	30867	2.04	1.0E-80	11417801	NT	Homo sapiens similar to rat myomegalin (LOC84182), mRNA
10564	23100	36114	3.56	8.0E-81	A1251752.1	EST_HUMAN	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MNI1), mRNA
10564	23100	36114	3.56	8.0E-81	A1251752.1	EST_HUMAN	q180g05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1854296 3'
11033	23547	36562	6.13	8.0E-81	BE384525.1	EST_HUMAN	q180g05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1854296 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7289	18827	32688	3.19	7.0E-81	A822115.1	EST_HUMAN	zab01c08.05 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:289918 3'
4478	17081	29510	4.95	6.0E-81	BE256829.1	EST_HUMAN	601111970F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352840 5'
4478	17081	29511	4.95	6.0E-81	BE256828.1	EST_HUMAN	601111970F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352840 5'
5487	18121	30528	1.71	6.0E-81	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
5487	18121	30529	1.71	6.0E-81	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
9182	21697	34841	1.22	6.0E-81	AA360017.1	EST_HUMAN	EST08128 Fetal lung II Homo sapiens cDNA 5' end
12240	24453	30955	2.16	6.0E-81	BF679022.1	EST_HUMAN	602153688F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4284601 5'
12240	24453	30958	2.16	6.0E-81	BF679022.1	EST_HUMAN	602153688F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4284601 5'
2258	14832	27410	2.66	5.0E-81	BE268042.1	EST_HUMAN	601125505F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3345480 5'
8351	20892	33813	1.42	5.0E-81	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
8351	20892	33814	1.42	5.0E-81	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
9568	22098	35025	1.28	5.0E-81	M60316.1	NT	Human transforming growth factor-beta (tgf-beta) mRNA, complete cds
9568	22098	35028	1.28	5.0E-81	M60316.1	NT	Human transforming growth factor-beta (tgf-beta) mRNA, complete cds
11455	23905	36972	2.68	5.0E-81	9509634	NT	Homo sapiens hypothetical protein (FLJ11046), mRNA
238	12898	25381	1.3	4.0E-81	AF252257.1	NT	Homo sapiens CRP2 binding protein mRNA, partial cds
731	13351	25846	1.34	4.0E-81	A621435.1	EST_HUMAN	th60e12.x1 NC1_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2122702 3' similar to TR:Q85560 Q85560
3208	15818	28284	4.78	4.0E-81	AB037788.1	NT	Homo sapiens mRNA for KIAA1345 protein, partial cds
3680	16291	28760	0.98	4.0E-81	AW004608.1	EST_HUMAN	ws80h03.x1 NC1_CGAP_Co3 Homo sapiens cDNA clone IMAGE:2505289 3' similar to TR:O43815 O43815
4240	16828	29277	2.39	4.0E-81	AF263308.1	NT	STRIATIN.;
4240	16828	29278	2.39	4.0E-81	AF263308.1	NT	Homo sapiens rab3 interacting protein variant 2 mRNA, partial cds
4481	17098	29516	1.08	4.0E-81	8923209	NT	Homo sapiens rab3 interacting protein variant 2 mRNA, partial cds
7321	18848	32708	0.86	4.0E-81	4757893	NT	Homo sapiens hypothetical protein FLJ20220 (FLJ20220), mRNA
8229	20770	33688	1.71	4.0E-81	X08889.1	NT	Homo sapiens calcium channel, voltage-dependent, L type, alpha 2delta subunit (CACNA2) mRNA
8482	21021	33936	3.39	4.0E-81	U20197.1	NT	Human mRNA for amyloid A4(751) protein
8482	21021	33937	3.39	4.0E-81	U20197.1	NT	Human cone photoreceptor cGMP-phosphodiesterase alpha' subunit gene, exons 2 and 3
9153	21698	34632	4.78	4.0E-81	AB018001.1	NT	Human cone photoreceptor cGMP-phosphodiesterase alpha' subunit gene, exons 2 and 3
10012	22507	35498	1.79	4.0E-81	11425281	NT	Homo sapiens mRNA for Death-associated protein kinase 2, complete cds
10075	22570	35564	0.57	4.0E-81	11439065	NT	Homo sapiens ligase I, DNA, ATP-dependent (LIG1), mRNA
10075	22570	35565	0.57	4.0E-81	11439065	NT	Homo sapiens acyl-Coenzyme A dehydrogenase family, member 8 (ACAD8), mRNA
11063	23575	36812	2.85	4.0E-81	4759085	NT	Homo sapiens acyl-Coenzyme A dehydrogenase family, member 8 (ACAD8), mRNA
11063	23575	36813	2.85	4.0E-81	4759085	NT	Homo sapiens vesicle trafficking protein sec22b (SEC22B) mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11708	24981	30834	11.8	4.0E-81	11417882	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
11708	24981	30835	11.8	4.0E-81	11417882	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12277	24481	30838	2.13	4.0E-81	11417871	NT	Homo sapiens beta-ureidopropionase (LOC51733), mRNA
12277	24481	30839	2.13	4.0E-81	11417871	NT	Homo sapiens beta-ureidopropionase (LOC51733), mRNA
12430	24572	30812	4.2	4.0E-81	11417874	NT	Homo sapiens transcobalamin II; macrocytic anemia (TCN2), mRNA
1310	13804	28422	9.81	3.0E-81	Y18000.1	NT	Homo sapiens NF2 gene
1310	13804	28423	9.81	3.0E-81	Y18000.1	NT	Homo sapiens NF2 gene
2409	14977	27551	1.68	3.0E-81	AF077188.1	NT	Homo sapiens cullin 4A (CUL4A) mRNA, complete cds
3020	15638	28112	5.8	3.0E-81	4506280	NT	Homo sapiens plateletrophin (heparin binding growth factor 8, neurite growth-promoting factor 1) (PTN) mRNA
3020	15638	28113	5.8	3.0E-81	4506280	NT	Homo sapiens plateletrophin (heparin binding growth factor 8, neurite growth-promoting factor 1) (PTN) mRNA
5143	17714		2.95	3.0E-81	AL168283.2	NT	Homo sapiens chromosome 21 segment HS21C083
2859	15478	27953	2.07	2.0E-81	BE784638.1	EST_HUMAN	601474072F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3877121 5'
2859	15478	27954	2.07	2.0E-81	BE784638.1	EST_HUMAN	601474072F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3877121 5'
3841	18440	28802	0.75	2.0E-81	AW611542.1	EST_HUMAN	Hg85c01.x1 NC1_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2852384 3'
12591	18440	28802	2.77	2.0E-81	AW611542.1	EST_HUMAN	Hg85c01.x1 NC1_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2852384 3'
1468	14060	28595	0.62	1.0E-81	W28639.1	EST_HUMAN	3393 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
4613	17198	29642	1.81	1.0E-81	AA040370.1	EST_HUMAN	2k45h09.r1 Soares_pregnant_uterus_Nih-IPU Homo sapiens cDNA clone IMAGE:485825 5' similar to PIR:S52437 S52437 CDP-diacylglycerol synthase - fruit fly
4750	17331	29774	8.65	1.0E-81	BE047908.1	EST_HUMAN	tz45c04.y1 NC1_CGAP_Brd52 Homo sapiens cDNA clone IMAGE:2281528 5'
5049	17622	30067	1.14	1.0E-81	AW182428.1	EST_HUMAN	Y42a03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2659852 3'
5448	18017	37139	3.85	1.0E-81	U87828.1	NT	Human ascorbate hydratase (ACO2) gene, exon 3
5556	18188	30803	3.58	1.0E-81	11432968	NT	Homo sapiens polymerase (DNA directed), gamma (POLG), mRNA
5556	18188	30804	3.58	1.0E-81	11432968	NT	Homo sapiens polymerase (DNA directed), gamma (POLG), mRNA
5893	18319	30818	0.77	1.0E-81	AA255589.1	EST_HUMAN	zr65d08.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:582475 5' similar to SW:PR12_HUMAN P49643 DNA PRIMASE 58 KD SUBUNIT
5835	18459	31180	3.92	1.0E-81	U52351.1	NT	Homo sapiens arm-repeat protein NIPRAP/neurjungin (CTNND2) mRNA, partial cds
5835	18459	31181	3.92	1.0E-81	U52351.1	NT	Homo sapiens arm-repeat protein NIPRAP/neurjungin (CTNND2) mRNA, partial cds
6295	18903	31674	1.82	1.0E-81	BF674641.1	EST_HUMAN	602137894F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4274536 5'
6838	19428	32242	0.73	1.0E-81	AJ133289.1	NT	Homo sapiens caveolin-1/-2 locus, Contig1, D7S522, genes CAV2 (exons 1, 2a, and 2b), CAV1 (exons 1 and 2)
7748	20258	33151	7.93	1.0E-81	11432968	NT	Homo sapiens polymerase (DNA directed), gamma (POLG), mRNA
7762	20270	33168	0.72	1.0E-81	AJ250408.1	NT	Homo sapiens GLI3 gene for GLI3 protein

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID N :	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9891	22190	35163	13.75	1.0E-81	BE958278.1	EST_HUMAN	601645051F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3930228 5'
9891	22190	35164	13.75	1.0E-81	BE958278.1	EST_HUMAN	601645051F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3930228 5'
9878	22376	35353	4.13	1.0E-81	BE564387.1	EST_HUMAN	601343180F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3985483 5'
							act14d06.s1 Stratagene HeLa cell s3 937218 Homo sapiens cDNA clone IMAGE:858427 3' similar to SW:YB38 YEAST P38126 HYPOTHETICAL 60.5 KD PROTEIN IN RPS101-RPS13 INTERGENIC REGION.;
10014	22509	35500	1.16	1.0E-81	AA630784.1	EST_HUMAN	601577339F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3838280 5'
10016	22511	35502	2.64	1.0E-81	BE744545.1	EST_HUMAN	601577339F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3838280 5'
10016	22511	35503	2.64	1.0E-81	BE744545.1	EST_HUMAN	601577339F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3838280 5'
10402	22896	35892	1.47	1.0E-81	AW887560.1	EST_HUMAN	CN3-NN0059-140400-147-a12 NN0059 Homo sapiens cDNA
10967	23482	36508	2.02	1.0E-81	AW944896.1	EST_HUMAN	MFR0-CT0006-250599-019 CT0006 Homo sapiens cDNA
10967	23482	36509	2.02	1.0E-81	AW944896.1	EST_HUMAN	MFR0-CT0006-250599-019 CT0006 Homo sapiens cDNA
10971	23486	36514	1.57	1.0E-81	AW798167.1	EST_HUMAN	RC3-UM0046-280200-011-a08 UM0046 Homo sapiens cDNA
10971	23486	36515	1.57	1.0E-81	AW798167.1	EST_HUMAN	RC3-UM0046-280200-011-a08 UM0046 Homo sapiens cDNA
11152	18027	30489	2.07	1.0E-81	AW960658.1	EST_HUMAN	EST372729 MAGE resequences, MAGF Homo sapiens cDNA
11398	23650	36916	2.34	1.0E-81	BF204263.1	EST_HUMAN	601867714F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4110459 5'
11920	24256	31012	3.39	1.0E-81	11418138	NT	Homo sapiens phosphatase 5 (epididymal endrogen-related protein) (GPX5), transcript variant 2, mRNA
14	12693	25149	13.13	8.0E-82	AF161406.1	NT	Homo sapiens HSPC288 mRNA, partial cds
111	12693	25149	6.9	8.0E-82	AF161406.1	NT	Homo sapiens HSPC288 mRNA, partial cds
285	12941	25427	1.89	8.0E-82	U08988.1	NT	Human CRFB4 gene, partial cds
847	13463	25971	2.2	8.0E-82	U08988.1	NT	Human CRFB4 gene, partial cds
820	13533	26061	1.5	8.0E-82	U08988.1	NT	Human CRFB4 gene, partial cds
1537	14129	26995	1.12	8.0E-82	AB037748.1	NT	Human CRFB4 gene, partial cds
							Homo sapiens mRNA for KIAA1327 protein, partial cds
1697	14290	28826	1.42	8.0E-82	6715601	NT	Homo sapiens glutathione peroxidase 5 (epididymal endrogen-related protein) (GPX5), transcript variant 2, mRNA
4328	16914	29358	0.77	8.0E-82	8623432	NT	Homo sapiens hypothetical protein FLJ20461 (FLJ20461), mRNA
1498	14091		1.45	7.0E-82	BF035327.1	EST_HUMAN	601458331F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3862088 5'
2794	16347	27916	1.21	7.0E-82	AU144050.1	EST_HUMAN	AU144050 HEMBA1 Homo sapiens cDNA clone HEMBA1000752 3'
12395	24555		1.37	7.0E-82	AA515612.1	EST_HUMAN	nf89e11.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:823186 3'
1710	14303	28840	20.15	4.0E-82	AF081494.1	NT	Homo sapiens alpha-tubulin isoform 1 mRNA, complete cds
5698	18314	30812	0.83	4.0E-82	BF351691.1	EST_HUMAN	QV2-HT0540-120900-382-f08 HT0540 Homo sapiens cDNA
5698	18314	30813	0.83	4.0E-82	BF351691.1	EST_HUMAN	QV2-HT0540-120900-382-f08 HT0540 Homo sapiens cDNA
							wp75e09.x1 NCI_CGAP_Bn26 Homo sapiens cDNA clone IMAGE:2467624 3' similar to TR: 75276 O75276 PKD1;
11563	24010	37080	5.53	4.0E-82	AB97300.1	EST_HUMAN	Homo sapiens presenilin-1 gene, exons 1 and 2
12179	24415		5.98	4.0E-82	AF029701.2	NT	

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
289	12955	25444	14.77	3.0E-82	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant, Alzheimer disease) (APP), mRNA
732	13552	25847	2.11	3.0E-82	BE005705.1	EST_HUMAN	RC2-BN0120-010400-013-02 BN0120 Homo sapiens cDNA
820	13437	25844	8.87	3.0E-82	5174702	NT	Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
903	13517	26035	3.37	3.0E-82	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant, Alzheimer disease) (APP), mRNA
1089	13704		39.06	3.0E-82	AA725848.1	EST_HUMAN	a123e05.a1 Soares_testis_NHT Homo sapiens cDNA clone 1343848 3'
1399	13993	26522	1.11	3.0E-82	AW875073.1	EST_HUMAN	RC9-PT0001-180100-021-802 PT0001 Homo sapiens cDNA
1515	14107	26843	2.15	3.0E-82	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
1945	14529	27085	1.59	3.0E-82	BE813232.1	EST_HUMAN	RC1-BN0005-260700-018-g04 BN0005 Homo sapiens cDNA
2050	14631	27202	1.18	3.0E-82	4501922	NT	Homo sapiens adenylate cyclase activating polypeptide 1 (pituitary) receptor type I (ADCYAP1R1) mRNA
3310	15921		2.54	3.0E-82	5453811	NT	Homo sapiens neurotrophic tyrosine kinase, receptor, type 2 (NTRK2) mRNA
5047	17820	30065	0.92	3.0E-82	AA135979.1	EST_HUMAN	zn83b04.r1 Strabegene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE 565711 5' similar to SW:PAGT_BOVIN_Q07537 POLYPEPTIDE N-ACETYL GALACTOSAMINYL TRANSFERASE :
8083	20634	33346	2.5	3.0E-82	11425208	NT	Homo sapiens erythrin-like with transmembrane domains 1 (ANKTM1), mRNA
8491	21030	33049	0.82	3.0E-82	11432889	NT	Homo sapiens contactin 6 (CNTN6), mRNA
8491	21030	33950	0.82	3.0E-82	11432889	NT	Homo sapiens contactin 6 (CNTN6), mRNA
9738	22238	35215	5.16	3.0E-82	AB028000.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
9738	22238	35216	5.16	3.0E-82	AB028000.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
623	13250	25723	2.46	2.0E-82	AB023216.1	NT	Homo sapiens mRNA for KIAA0989 protein, partial cds
623	13250	25724	2.46	2.0E-82	AB023216.1	NT	Homo sapiens mRNA for KIAA0989 protein, partial cds
1724	14315	26857	1.52	2.0E-82	AL046390.1	EST_HUMAN	Homo sapiens mRNA for KIAA0989 protein, partial cds
3837	16436	26898	1.47	2.0E-82	M89879.1	NT	DKFZp434M117_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434M117 5'
3913	16511	26973	1.03	2.0E-82	D87675.1	NT	H. sapiens plasminogen-epolipoprotein (a) gene family, exon for 1st intron 4 repeat
4095	16880	29148	0.62	2.0E-82	U78833.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4317	16903	29347	0.68	2.0E-82	4504116	NT	Human integral membrane serine protease Sepsase mRNA, complete cds
4656	17238	29683	1.38	2.0E-82	AB028019.1	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4658	17238	29684	1.38	2.0E-82	AB028019.1	NT	Homo sapiens mRNA for KIAA1098 protein, partial cds
4895	17599	30013	2.59	2.0E-82	AF045555.1	NT	Homo sapiens mRNA for KIAA1098 protein, partial cds
5239	17803	30223	1.36	2.0E-82	4507580	NT	Homo sapiens wiscr1 (WBSCR1) and wiscr5 (WBSCR5) genes, complete cds, alternatively spliced and replication factor C subunit 2 (RFC2) gene, complete cds
6239	17803	30224	1.36	2.0E-82	4507580	NT	Homo sapiens tumor necrosis factor receptor superfamily, member 5 (TNFRSF5) mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5320	17882	30301	1.3	2.0E-82	4502503	NT	Homo sapiens complement component 5 (C5) mRNA
5662	18289	30767	3.76	2.0E-82	AB018270.1	NT	Homo sapiens mRNA for KIAA0727 protein, partial cds
6322	18829	31705	4.77	2.0E-82	AF234882.1	NT	Homo sapiens FAM4A1 splice variant a (FAM4A1) mRNA, complete cds
7673	25121		1.02	2.0E-82	AK478428.1	EST_HUMAN	tnc21g05.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2157272 3'
7771	20280	33177	0.71	2.0E-82	8923130	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
8247	20788	33707	1.82	2.0E-82	11321570	NT	Homo sapiens slit (Drosophila) homolog 3 (SLIT3), mRNA
10018	22513	35505	1.45	2.0E-82	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
10018	22513	35508	1.45	2.0E-82	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
11149	23857	36888	1.95	2.0E-82	11417191	NT	Homo sapiens leucylcystinyl aminopeptidase (LNIPEP), mRNA
11149	23857	36700	1.95	2.0E-82	11417191	NT	Homo sapiens leucylcystinyl aminopeptidase (LNIPEP), mRNA
11155	23862	36707	2.35	2.0E-82	11417105	NT	Homo sapiens leucylcystinyl aminopeptidase (LNIPEP), mRNA
11188	23893	36741	8.88	2.0E-82	11417105	NT	Homo sapiens 3-hydroxy-3-methylglutaryl-Coenzyme A reductase (HMGCR), mRNA
11188	23893	36742	8.88	2.0E-82	U80738.1	NT	Homo sapiens CAGF9 mRNA, partial cds
11737	24140		4.92	2.0E-82	U80738.1	NT	Homo sapiens CAGF9 mRNA, partial cds
12288	24498		2.45	2.0E-82	AA011278.1	EST_HUMAN	zb31d10.s1 Scores_perathyroid_tumor_Nbt-IPA Homo sapiens cDNA clone IMAGE:305203 3'
618	13245	26718	1.59	1.0E-82	11545821	NT	z01g08.l1 Scores_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:428568 5'
1250	13847		1.25	1.0E-82	BE865108.1	EST_HUMAN	Homo sapiens melanoma differentiation associated protein-5 (MDA5), mRNA
1328	13923	28443	2.7	1.0E-82	BE084386.1	EST_HUMAN	601510859F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3812207 5'
1330	13924	28444	0.84	1.0E-82	AB011110.2	NT	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
8872	21411	34334	1.31	1.0E-82	AB037838.1	NT	Homo sapiens mRNA for KIAA0538 protein, partial cds
9571	22071	35032	0.48	1.0E-82	AB014562.1	NT	Homo sapiens mRNA for KIAA1417 protein, partial cds
10143	22638		1.19	1.0E-82	BF515838.1	EST_HUMAN	Homo sapiens mRNA for KIAA0682 protein, partial cds
10824	23150	38168	2.41	1.0E-82	AL163209.2	NT	UHL-BW1-acc-f-03-0-UJ.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3084053 3'
10887	23408	38425	1.56	1.0E-82	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C008
8849	21188	34106	4.39	9.0E-83	BF672220.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
10175	22870	35884	0.78	9.0E-83	BE253347.1	EST_HUMAN	602150403F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4281561 5'
1458	14051	28583	4.53	8.0E-83	BE383973.1	EST_HUMAN	601117160F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3357734 5'
1721	15394	28852	2.5	8.0E-83	N66951.1	EST_HUMAN	601273346F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3814382 5'
1401	13895	28523	1	7.0E-83	AW385528.1	EST_HUMAN	za48f12.s1 Scores_fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:295823 3'
							QV4-LT0018-271289-088-h11 LT0018 Homo sapiens cDNA
							no12h01.s1 NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100467 3' similar to contains Alu repetitive element
2890	15507		1.75	7.0E-83	AA584655.1	EST_HUMAN	7p37a07.x1 NCI_CGAP_Pr28 Homo sapiens cDNA clone IMAGE:3847883 3' similar to TR:Q9Y316 Q9Y316
4940	17515		6.94	7.0E-83	BF221813.1	EST_HUMAN	DJ207H1.1;
6202	18812	31582	0.69	7.0E-83	11428657	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
428	13061	25555	3.97	6.0E-83	M33320.1	NT	Human platelet Glycoprotein IIb (GP1Ib) gene, exons 2-29
1822	14411	28858	2.07	6.0E-83	AW573088.1	EST_HUMAN	H31H03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2833525 3' similar to
3087	15702		0.81	6.0E-83	AF231919.1	NT	SW-YBEB_HAEIN P44471 HYPOTHETICAL PROTEIN H10034. ;
3619	16222	28700	1.18	6.0E-83	11430241	NT	Homo sapiens chromosome 21 unknown mRNA
5497	18131	30539	2.35	6.0E-83	4507868	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
6174	18785	31553	1.18	6.0E-83	AI010770.1	NT	Homo sapiens VAMP (vesicle-associated membrane protein)-associated protein A (33kD) (VAPA) mRNA, end translated products
7613	20034	32800	1.96	6.0E-83	11422024	NT	Homo sapiens hyperton gene, exons 1-50
9594	22094	35058	3.97	6.0E-83	4505314	NT	Homo sapiens met proto-oncogene (hepatocyte growth factor receptor) (MET), mRNA
9684	22183	35157	2.77	6.0E-83	11430647	NT	Homo sapiens myomesin (M-protein) 2 (185kD) (MYOM2), mRNA
9684	22183	35158	2.77	6.0E-83	11430647	NT	Homo sapiens pre-mRNA splicing factor similar to S. cerevisiae Ptp18 (PRP18), mRNA
11405	23856		6.64	6.0E-83	AA486105.1	EST_HUMAN	Homo sapiens pre-mRNA splicing factor similar to S. cerevisiae Ptp18 (PRP18), mRNA
11685	24102		5.52	6.0E-83	AF240788.1	NT	ab14e10.s1 Stragene lung (8037210) Homo sapiens cDNA clone IMAGE:840810 3' similar to contains THR.12 T-HR repetitive element ;
982	13594		10.4	5.0E-83	U17893.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2094	15397		1.12	5.0E-83	AF006305.1	NT	Human succinate dehydrogenase iron-protein subunit (sdhB) gene, exon 5
3700	16301	28769	0.98	5.0E-83	AL133207.2	NT	Homo sapiens 28S proteasome regulatory subunit (SUG2) mRNA, complete cds
3977	16575	29045	0.84	5.0E-83	4885180	NT	Novel human gene mapping to chromosome X
4527	17111	29555	0.6	5.0E-83	AL183210.2	NT	Homo sapiens deoxyribonuclease I (DNASE1), mRNA
5238	17802	30221	13.17	5.0E-83	4557013	NT	Homo sapiens chromosome 21 segment HS21C010
5238	17802	30222	13.17	5.0E-83	4557013	NT	Homo sapiens catalase (CAT) mRNA
668	13282	28773	1.34	4.0E-83	AF224689.1	NT	Homo sapiens catalase (CAT) mRNA
3564	16168	28650	1.07	4.0E-83	BE888078.1	EST_HUMAN	Homo sapiens marinosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
1035	13645		3.47	3.0E-83	AA308311.1	EST_HUMAN	601511580F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913195 5'
6692	19288		0.68	3.0E-83	AI217223.1	EST_HUMAN	EST1795-42 Placenta 1 Homo sapiens cDNA similar to similar to endogenous retrovirus ERV9
1835	14423	28973	1.31	2.0E-83	AA983492.1	EST_HUMAN	qf75e08.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755682 3'
1835	14423	28974	1.31	2.0E-83	AA983492.1	EST_HUMAN	cd84g05.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1621592 3' similar to TR:Q82814
1989	14553	27109	2.88	2.0E-83	N68951.1	EST_HUMAN	Q92814 MYELOBLAST KIAA0216. ;
2876	15494	27984	1.06	2.0E-83	BE828694.1	EST_HUMAN	cd84g05.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1621592 3' similar to TR:Q82814

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3307	15918		2.53	2.0E-83	11430834	NT	Homo sapiens sal (Drosophila)-like 1 (SALL1), mRNA
3842	18441		0.78	2.0E-83	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
4429	17015	29457	4.01	2.0E-83	AF202878.1	NT	Homo sapiens hematopoietic progenitor cell antigen CD34 precursor (CD34) mRNA, partial cds
4758	17337	29781	4.54	2.0E-83	7706398	NT	Homo sapiens ankyrin repeat-containing protein ASB-2 (LOC51676), mRNA
4758	17337	29782	4.54	2.0E-83	7706398	NT	Homo sapiens ankyrin repeat-containing protein ASB-2 (LOC51676), mRNA
5475	18109	30518	0.8	2.0E-83	U08678.1	NT	Human carcinoembryonic antigen gene family member 18 (CGM18) gene, exons A1 and B1
6119	18735	31488	1.28	2.0E-83	BE885401.1	EST_HUMAN	601507482F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3909088 5'
7482	18985	32850	6.08	2.0E-83	AF129533.1	NT	Homo sapiens F-box protein Fbx3 (FBL3B) mRNA, partial cds
7784	20327	33232	0.53	2.0E-83	AB001025.1	NT	Homo sapiens mRNA for brain ryanodine receptor, complete cds
7784	20327	33233	0.53	2.0E-83	AB001025.1	NT	Homo sapiens mRNA for brain ryanodine receptor, complete cds
7828	20470	33379	1.54	2.0E-83	U68707.1	NT	Rattus norvegicus densin-180 mRNA, complete cds
8258	20797	33714	2.17	2.0E-83	AF011920.1	NT	Homo sapiens protein kinase CK2 catalytic subunit alpha gene, exon 1
8258	20797	33715	2.17	2.0E-83	AF011920.1	NT	Homo sapiens protein kinase CK2 catalytic subunit alpha gene, exon 1
9797	22285	35278	0.65	2.0E-83	BF128748.1	EST_HUMAN	601811127F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4053894 5'
9847	22442	35419	2.41	2.0E-83	M22094.1	NT	Human neural cell adhesion molecule (N-CAM) secreted isoform mRNA, 3' end
9847	22442	35420	2.41	2.0E-83	M22094.1	NT	Human neural cell adhesion molecule (N-CAM) secreted isoform mRNA, 3' end
10025	22520	35516	1.12	2.0E-83	AU117659.1	EST_HUMAN	AU117659 HEMBA1 Homo sapiens cDNA clone HEMBA1001810 5'
10082	22587	35580	0.78	2.0E-83	AW505800.1	EST_HUMAN	UII-HF-BND-and-h-07-Q-UJ171 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3081852 5'
10729	23255	36271	4.98	2.0E-83	AL134452.1	NT	Homo sapiens KIAA0985 protein (KIAA0985), mRNA
10808	23328	36340	1.96	2.0E-83	AL134452.1	EST_HUMAN	DKFZp547J135_1 547 (synonym: hfbt1) Homo sapiens cDNA clone DKFZp547J135 5'
10808	23328	36341	1.96	2.0E-83	AL134452.1	EST_HUMAN	DKFZp547J135_1 547 (synonym: hfbt1) Homo sapiens cDNA clone DKFZp547J135 5'
12342	24523		4.52	2.0E-83	AB011398.1	NT	Homo sapiens gene for AF-8, complete cds
1457	14048	26580	2.83	1.0E-83	4504328	NT	Homo sapiens hydroxycy-Coenzyme A dehydrogenase3-ketacyl-Coenzyme A thiolase/Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB) mRNA
1457	14048	26581	2.83	1.0E-83	4504328	NT	Homo sapiens hydroxycy-Coenzyme A dehydrogenase3-ketacyl-Coenzyme A thiolase/Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB) mRNA
1506	14098	26835	15.46	1.0E-83	AF105087.1	NT	Homo sapiens lipopolysaccharide-binding protein (LBP) mRNA, complete cds
1506	14098	26836	15.46	1.0E-83	AF105087.1	NT	Homo sapiens lipopolysaccharide-binding protein (LBP) mRNA, complete cds
2064	14644	27218	1.11	1.0E-83	4503652	NT	Homo sapiens fatty-acid-Coenzyme A ligase, very long-chain 1 (FACVL1) mRNA
2881	15239	27807	1.06	1.0E-83	BE883680.1	EST_HUMAN	601507375F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3908754 5'
3217	15829	28308	0.89	1.0E-83	7682349	NT	Homo sapiens cell recognition molecule Caspr2 (KIAA0868), mRNA
3836	16534	29000	5.6	1.0E-83	AF053788.1	NT	Rattus norvegicus brain specific cortactin-binding protein CBP80 mRNA, partial cds
4328	16915	28359	2.45	1.0E-83	Z75822.1	NT	H. sapiens gene for mitochondrial dodecanoyl-CoA delta-isoomerase, exon 3

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6767	16388	32204	1.58	1.0E-83	A027614.1	EST_HUMAN	068608.x1 Soares_tastis_NHT Homo sapiens cDNA clone IMAGE:1645431 3' similar to gb:M84241 QM PROTEIN (HUMAN);
3884	16462	28826	3.57	7.0E-84	BE001208.1	EST_HUMAN	601876023F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3958853 5'
1338	13632	28451	3.5	6.0E-84	BE838864.1	EST_HUMAN	RC2-FN0119-200600-011-q05 FN0119 Homo sapiens cDNA
1338	13632	28452	3.5	6.0E-84	BE838864.1	EST_HUMAN	RC2-FN0119-200600-011-q05 FN0119 Homo sapiens cDNA
2441	15008	27580	21.62	6.0E-84	AA76874.1	EST_HUMAN	ae88d03.s1 Strategene schizo brain S11 Homo sapiens cDNA clone IMAGE:971020 3'
5449	18019		2.84	6.0E-84	AL042863.2	EST_HUMAN	DKFZp434H0322_r1_434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434H0322 5'
6709	18336	30840	1.74	6.0E-84	AA897339.1	EST_HUMAN	al47g03.s1 Soares_NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:1460500 3' similar to gb:M14338 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN);
5841	18465	31189	1.06	6.0E-84		NT	Homo sapiens acetyl LDL receptor, SREC-scavenger receptor expressed by endothelial cells (SREC), mRNA
5841	18465	31189	1.06	6.0E-84	11428718	NT	Homo sapiens acetyl LDL receptor, SREC-scavenger receptor expressed by endothelial cells (SREC), mRNA
7489	20012	32878	3.2	6.0E-84	BE810371.1	EST_HUMAN	PM0-LT0019-190600-004-F02 LT0019 Homo sapiens cDNA
7679	20160	33079	0.93	6.0E-84	AF038391.1	NT	Homo sapiens pre-mRNA splicing factor (PRP16) mRNA, complete cds
8018	20560	33461	1.85	6.0E-84	BE70199.1	EST_HUMAN	PM4-FT0054-160600-004-e10 FT0054 Homo sapiens cDNA
11409	23860		2	6.0E-84	AW368812.1	EST_HUMAN	ILD-BT0169-091189-139-c08 BT0168 Homo sapiens cDNA
743	13363	25858	0.69	5.0E-84	AA382811.1	EST_HUMAN	EST96094 Testis I Homo sapiens cDNA 5' end
3048	15684		1.4	5.0E-84	AF109718.1	NT	Homo sapiens chromosome 3 subtelomeric region
11418	23870	36931	2.7	5.0E-84	11428740	NT	Homo sapiens regulatory factor X, 3 (influences HLA class II expression) (RFX3), mRNA
11508	23955	37024	1.95	5.0E-84	AB032867.1	NT	Homo sapiens mRNA for KIAA1131 protein, partial cds
11508	23955	37025	1.95	5.0E-84	AB032867.1	NT	Homo sapiens mRNA for KIAA1131 protein, partial cds
1458	14048	28578	2.3	4.0E-84	AF683321.1	EST_HUMAN	via78-c04.x1 Soares_NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2302086 3' similar to SW:NRDC_HUMAN O43847 NARDILYSIN PRECURSOR;
5085	17658	30069	0.78	4.0E-84	4505928	NT	Homo sapiens polymerase (DNA-directed), alpha (70kD) (POLA2), mRNA
5086	17658	30100	1.62	4.0E-84	AF068601.2	NT	Homo sapiens myosin light chain kinase isoform 2 (MLCK) mRNA, complete cds
5751	18377	31087	1.42	4.0E-84	11366168	NT	Homo sapiens protein tyrosine phosphatase, receptor type, G (PTPRG), mRNA
5751	18377	31088	1.42	4.0E-84	11366168	NT	Homo sapiens protein tyrosine phosphatase, receptor type, G (PTPRG), mRNA
6414	18017	31800	2.16	4.0E-84	AF058650.1	NT	Homo sapiens histone deacetylase 3 (HDAC3) gene, complete cds
7643	20155	33041	13.58	4.0E-84		NT	Homo sapiens KIAA0783 gene product (KIAA0783), mRNA
8842	21381	34305	1.06	4.0E-84	4557528	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
8842	21381	34306	1.06	4.0E-84	4557528	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
10788	23321	36331	5.76	4.0E-84	AB032856.1	NT	Homo sapiens mRNA for KIAA1130 protein, partial cds
338	12960	25477	1.97	3.0E-84	AF026200.1	NT	Homo sapiens Bach1 protein homolog mRNA, partial cds

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1194	13795	26304	0.86	3.0E-84	4756081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
2003	14585	27144	1.93	3.0E-84	5453855	NT	Homo sapiens perlecanin material 1 (PCM1) mRNA
2051	14632	27203	1.94	3.0E-84	AL096880.1	NT	Novel human mRNA containing Zinc finger C2H2 type domains
3812	18411	28878	5.94	3.0E-84	AF014458.1	NT	Homo sapiens X-linked juvenile retinoschisis precursor protein (XLRIS1) mRNA, complete cds
10758	23282		10.76	3.0E-84	AI983801.1	EST_HUMAN	wu20d05.x1 Soares_Diackgrafe_cdon_NHCD Homo sapiens cDNA clone IMAGE:2520585 3' similar to
2153	14730	27304	6.66	2.0E-84	BE695397.1	EST_HUMAN	gb.L05063.60S RIBOSOMAL PROTEIN L18A (HUMAN);
2153	14730	27305	6.66	2.0E-84	BE695397.1	EST_HUMAN	CM1-BT0795-190600-272-608 BT0795 Homo sapiens cDNA
2970	15586	28068	11.6	2.0E-84	AF036943.1	NT	CM1-BT0795-190600-272-608 BT0795 Homo sapiens cDNA
2988	15605	28085	1.3	2.0E-84	X89211.1	NT	Homo sapiens myelin transcription factor 1-like (MYT1-L) mRNA, complete cds
5717	18343	30849	1.02	2.0E-84	BF511575.1	EST_HUMAN	H.sapiens DNA for endogenous retroviral like element
5717	18343	30850	1.02	2.0E-84	BF511575.1	EST_HUMAN	UI-H-B14-act-a-02-Q-UI.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3084983 3'
6748	18341	32148	1.04	2.0E-84	H63370.1	EST_HUMAN	UI-H-B14-act-a-02-Q-UI.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3084983 3'
8001	20543		1.51	2.0E-84	AI288074.1	EST_HUMAN	yf56e11.s1 Soares fetal liver spleen 1NFSL Homo sapiens cDNA clone IMAGE:208324 3'
8269	21795	34744	0.89	2.0E-84	AU120280.1	EST_HUMAN	qm87c09.x1 NCI_CGAP_Lj5 Homo sapiens cDNA clone IMAGE:1865728 3'
9847	22146	35117	0.55	2.0E-84	H22841.1	EST_HUMAN	AU120280 HEMBB1 Homo sapiens cDNA clone HEMBB1000338 5'
11954	24279	31021	1.89	2.0E-84	BF448000.1	EST_HUMAN	ym49e11.1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:51383 5' similar to SP-APOH_RAT
11954	24279	31022	1.89	2.0E-84	BF448000.1	EST_HUMAN	P28844 BETA-2-GLYCOPROTEIN 1;
334	12986	25473	1.61	1.0E-84	AF114488.1	NT	nas30a02.x1 Lupskl_sympathetic_trunk Homo sapiens cDNA clone IMAGE:4080251 3' similar to
575	13205	25885	7.74	1.0E-84	4507852	NT	TR:Q9UGS3 Q9UGS3 DJ756G23.1;
749	13389		4	1.0E-84	11427631	NT	nas30a02.x1 Lupskl_sympathetic_trunk Homo sapiens cDNA clone IMAGE:4080251 3' similar to
1336	13930	28449	3.89	1.0E-84	AA984379.1	EST_HUMAN	TR:Q9UGS3 Q9UGS3 DJ756G23.1;
2089	14678	27248	2.49	1.0E-84	BE382137.1	EST_HUMAN	Homo sapiens intercalin short isoform (ITSN) mRNA, complete cds
2265	14839	27415	1.21	1.0E-84	11427197	NT	Homo sapiens tyrosine 3-monooxygenase/tyrosinase 5-monooxygenase activation protein, zeta polypeptide (YWHAZ) mRNA
2945	15581	28035	1.09	1.0E-84	4507848	NT	Homo sapiens complement component 5 (C5), mRNA
2945	15581	28036	1.09	1.0E-84	4507848	NT	am85b11.s1 Stragone schizo brain S11 Homo sapiens cDNA clone IMAGE:1628885 3'
3814	16414	28878	2.92	1.0E-84	AA720851.1	EST_HUMAN	601308006F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3628267 6'
4508	17082	28539	6.06	1.0E-84	AJ22041.1	NT	Homo sapiens perlecanin material 1 (PCM1), mRNA
4808	17387	28637	3.09	1.0E-84	AL043314.2	EST_HUMAN	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
4808	17387	28638	3.09	1.0E-84	AL043314.2	EST_HUMAN	hm12a08.s1 NCI_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1238108 3'
							Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
							DKFZp34N0323_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp34N0323 5'
							DKFZp34N0323_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp34N0323 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5037	17082	28639	3.8	1.0E-84	AJ23041.1	NT	Homo sapiens 956 kb contig between AML1 and CBR1 on chromosome 21q22, segment 1/3
6079	18696	31443	0.81	1.0E-84	11434422	NT	Homo sapiens speckle-type POZ protein (SPOP), mRNA
6337	18943	31722	1.46	1.0E-84	S73482.1	NT	uterine water channel-28 kDa erythrocyte integral membrane protein homolog [human, uterus, mRNA, 1340 nt]
6661	19538	32361	1.63	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
6661	19538	32362	1.63	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
7162	19694	32540	2.39	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
7488	20009	32875	3.27	1.0E-84	8363984	NT	Homo sapiens polymerase (DNA directed), alpha (POLA), mRNA
7595	20082	32868	1.18	1.0E-84	11430848	NT	Homo sapiens NGF-A binding protein 1 (ERG1 binding protein 1) (NAB1), mRNA
7598	20082	32868	2.45	1.0E-84	11430848	NT	Homo sapiens NGF-A binding protein 1 (ERG1 binding protein 1) (NAB1), mRNA
8454	21980	28036	4.5	1.0E-84	5031894	NT	Homo sapiens nuclear transport factor 2 (placental protein 15) (PP15), mRNA
8685	22184	35159	0.58	1.0E-84	AF224511.1	NT	Homo sapiens Ca2+-binding protein CABP3 (CABP3) gene, exon 6 and partial cds
8708	15561	28035	2.37	1.0E-84	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13), mRNA
8708	15561	28036	2.37	1.0E-84	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13), mRNA
11833	24188	31017	2.44	1.0E-84	11417812	NT	Homo sapiens purinergic receptor P2X-like 1, orphan receptor (P2RXL1), mRNA
11943	24274	31017	3.97	1.0E-84	11418185	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), mRNA
1002	13613		4.54	9.0E-85	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C009
1111	13715	28224	6.29	9.0E-85	U51432.1	NT	Homo sapiens nuclear protein Slp mRNA, complete cds
1111	13715	28225	6.29	9.0E-85	U51432.1	NT	Homo sapiens nuclear protein Slp mRNA, complete cds
1424	14017	28546	1.35	9.0E-85	4758898	NT	Homo sapiens leupodin (LDPL), mRNA
1622	14215	26746	9.44	9.0E-85	M33282.1	NT	Human plasminogen gene, exon 7
1622	14215	26747	9.44	9.0E-85	M33282.1	NT	Human plasminogen gene, exon 7
1714	14306	26845	2.45	9.0E-85	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZp434P211), mRNA
4338	16925	28398	0.97	9.0E-85	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
5008	17579	30023	0.96	9.0E-85	5901979	NT	Homo sapiens heat shock transcription factor 2 binding protein (HSF2BP), mRNA
5038	17611	30055	1.02	9.0E-85	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C088
1175	13777	26287	10.28	7.0E-85	L05094.1	NT	Homo sapiens ribosomal protein L27 mRNA, complete cds
11498	23948		11.38	7.0E-85	AF113210.1	NT	Homo sapiens MSTP030 mRNA, complete cds
11284	23748	36803	3.15	6.0E-85	11438573	NT	Homo sapiens DEADH (Asp-Glu-Ala-AspHis) box polypeptide 10 (RNA helicase) (DDX10), mRNA
11284	23748	36804	3.15	6.0E-85	11438573	NT	Homo sapiens DEADH (Asp-Glu-Ala-AspHis) box polypeptide 10 (RNA helicase) (DDX10), mRNA
2371	14941	27514	1.09	5.0E-85	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4525	17109		0.59	5.0E-85	AF211189.1	NT	Homo sapiens T-type calcium channel alpha1 subunit Alpha1-e isoform (CACNA1I) mRNA, complete cds
5642	18271	30744	1.42	5.0E-85	BF035974.1	EST_HUMAN	601458848F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3882402 5'
5642	18271	30745	1.42	5.0E-85	BF035974.1	EST_HUMAN	601458848F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3882402 5'
10988	23512	36545	1.95	5.0E-85	AF224668.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
12589	17109		3.17	5.0E-85	AF211189.1	NT	Homo sapiens T-type calcium channel alpha1 subunit Alpha1-e isoform (CACNA1I) mRNA, complete cds
6287	18905	31675	1.63	4.0E-85	BF677910.1	EST_HUMAN	602084730F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249087 5'
6287	18905	31676	1.63	4.0E-85	BF677910.1	EST_HUMAN	602084730F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249087 5'
10464	22958		1.64	4.0E-85	BE078263.1	EST_HUMAN	RC1-BT0623-120200-011-c07 BT0623 Homo sapiens cDNA
1342	13937	28458	0.88	3.0E-85	AF086157.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 6
1818	14408	26950	5.08	3.0E-85	T97495.1	EST_HUMAN	y653g08.1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:121504 5'
4405	16980	29434	0.93	3.0E-85	BE267189.1	EST_HUMAN	601189704F2 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3533616 5'
5025	17689	30043	1.44	3.0E-85	11024695	NT	Homo sapiens F-box only protein 24 (FBXO24), mRNA
5025	17689	30044	1.44	3.0E-85	11024695	NT	Homo sapiens F-box only protein 24 (FBXO24), mRNA
6283	18891	31659	6.49	3.0E-85	7662309	NT	Homo sapiens KIAA0793 gene product (KIAA0793), mRNA
6283	18891	31660	6.49	3.0E-85	7662309	NT	Homo sapiens KIAA0793 gene product (KIAA0793), mRNA
7032	19588		7.22	3.0E-85	AJ404488.1	NT	Homo sapiens mRNA for dynein heavy chain (DNAH9 gene)
7428	19952	32817	0.95	3.0E-85	11416870	NT	Homo sapiens GTPase regulator associated with the focal adhesion kinase pp125(FAK); KIAA0621 protein (KIAA0621), mRNA
7813	20356	33264	1.55	3.0E-85	U44953.1	NT	Homo sapiens DENN mRNA, complete cds
8445	20985	33900	0.78	3.0E-85	11525828	NT	Homo sapiens CGI-81 protein (LOC51108), mRNA
8609	21447	34369	3.75	3.0E-85	11430889	NT	Homo sapiens phospholipase C, epsilon (PLCE), mRNA
9230	21952	34901	1.32	3.0E-85	11421422	NT	Homo sapiens small nuclear ribonucleoprotein polypeptide B' (SNRNPB2), mRNA
9230	21952	34902	1.32	3.0E-85	11421422	NT	Homo sapiens small nuclear ribonucleoprotein polypeptide B' (SNRNPB2), mRNA
10377	22871	35964	0.91	3.0E-85	AF086842.1	NT	Homo sapiens small nuclear ribonucleoprotein polypeptide B' (SNRNPB2), mRNA
11380	23852	36885	2.25	3.0E-85	5031660	NT	Homo sapiens phospholipid scramblase mRNA, complete cds
12470	24595		2.19	3.0E-85	11418177	NT	Homo sapiens EGF-like repeats and discoidin I-like domains 3 (EDIL3), mRNA
988	19809	26124	3.12	2.0E-85	7657268	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
1078	13693	26194	2.1	2.0E-85	AF248540.1	NT	Homo sapiens KIAA0928 protein Msc2 interacting nuclear target (MINT) homolog (KIAA0928), mRNA
1450	14042	26570	3.85	2.0E-85	7706205	NT	Homo sapiens intracellular 2 (SH3D1B) mRNA, complete cds
1465	14057	26590	32.85	2.0E-85	5174775	NT	Homo sapiens CGI-201 protein (LOC51340), mRNA
						NT	Homo sapiens apolipoprotein C-II (APOC2) mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1465	14057	26591	32.65	2.0E-85	5174775	NT	Homo sapiens apolipoprotein C-II (APOC2) mRNA
2274	14948	27424	2.27	2.0E-85	U10525.1	NT	Human DNA polymerase beta gene, exons 12 and 13
2850	13978		8.53	2.0E-85	7667488	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3057	15673	28149	1.18	2.0E-85	M30638.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
4427	17013	29455	7.95	2.0E-85	4505080	NT	Human sapiens plasminogen (PLG) mRNA
4684	17248	29700	8.24	2.0E-85	4826877	NT	Homo sapiens reelin (RELN) mRNA
5036	17610	30054	1.19	2.0E-85	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5313	17875	30287	1.73	2.0E-85	4502212	NT	Homo sapiens arginase, liver (ARG1) mRNA
9197	21714	34658	1.33	2.0E-85	A1780820.1	EST_HUMAN	w87H08.x1 NCI_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2388431 3' similar to contains element
9567	22067	35027	0.84	2.0E-85	A1814458.1	EST_HUMAN	MSR1 repetitive element;
10163	22858	35654	1.38	2.0E-85	A1868384.1	EST_HUMAN	wd49403.x1 Scores_NFL_T_G8C_S1 Homo sapiens cDNA clone IMAGE:2331461 3'
2326	14897		2.43	1.0E-85	BE794308.1	EST_HUMAN	wm94d12.x1 NCI_CGAP_U2 Homo sapiens cDNA clone IMAGE:2443807 3'
2437	15004	27576	8.29	1.0E-85	BE618392.1	EST_HUMAN	601591416F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3045818 5'
2437	15004	27577	8.29	1.0E-85	BE618392.1	EST_HUMAN	601462817F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3866021 5'
9696	22185	35168	2.03	1.0E-85	BE267917.1	EST_HUMAN	601462817F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3866021 5'
10804	23327	36337	2.67	1.0E-85	AA778785.1	EST_HUMAN	601109738F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3350553 5'
10804	23327	36338	2.67	1.0E-85	AA778785.1	EST_HUMAN	345903.s1 Scores_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:463245 3'
10876	23387	36413	2.59	1.0E-85	BF311552.1	EST_HUMAN	345903.s1 Scores_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:453245 3'
10876	23387	36414	2.59	1.0E-85	BF311552.1	EST_HUMAN	601807003F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126440 5'
10943	23459	36482	2.48	1.0E-85	Y00052.1	NT	Human mRNA for T-cell cyclophilin
11605	24048	37114	2.17	1.0E-85	A1188420.1	EST_HUMAN	gi56a07.x1 NCI_CGAP_Bim25 Homo sapiens cDNA clone IMAGE:1880468 3'
11838	24363	30669	4.42	1.0E-85	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12098	24363	30669	5.48	1.0E-85	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1475	14067		17.55	9.0E-88	BE274217.1	EST_HUMAN	601120778F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2867680 5'
6275	18963	31651	1.65	8.0E-88	11424140	NT	Homo sapiens similar to CDC28 protein kinase 1 (H. sapiens) (LOC83041), mRNA
11543	23981	37063	1.65	8.0E-88	4503224	NT	Homo sapiens cytochrome P450, subfamily IIF, polypeptide 1 (CYP2F1) mRNA
244	12903	25384	0.68	7.0E-86	7682247	NT	Homo sapiens KIAA0680 gene product (KIAA0680), mRNA
972	13583	26096	1.06	7.0E-86	AA860801.1	EST_HUMAN	gi98f08.s1 Scores_parathyroid_tumor_NH-IPA Homo sapiens cDNA clone IMAGE:1403559 3'
972	13583	26097	1.06	7.0E-86	AA860801.1	EST_HUMAN	gi98f08.s1 Scores_parathyroid_tumor_NH-IPA Homo sapiens cDNA clone IMAGE:1403559 3'
6343	18949	31726	1.01	7.0E-86	9966888	NT	Homo sapiens tumor endothelial marker 7 precursor (TEM7), mRNA
6343	18949	31727	1.01	7.0E-86	9966888	NT	Homo sapiens tumor endothelial marker 7 precursor (TEM7), mRNA
7053	18072	30463	5.8	7.0E-86	11421737	NT	Homo sapiens Tax1 (human T-cell leukemia virus type I) binding protein 1 (TAX1BP1), mRNA
8679	21218	34138	3.41	7.0E-86	L38557.1	NT	Homo sapiens galactose oxidase (GALC) gene, exon 15

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9616	22116		1.53	7.0E-88	5453897	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
9673	22172	35148	1.82	7.0E-88	11528307	NT	Homo sapiens DGeorge syndrome critical region gene 6 (DGCR6), mRNA
10841	23362	36377	2.38	7.0E-88	11417012	NT	Homo sapiens similar to transcription factor CA150 (H. sapiens) (LOC83170), mRNA
10841	23362	36378	2.38	7.0E-88	11417012	NT	Homo sapiens similar to transcription factor CA150 (H. sapiens) (LOC83170), mRNA
11638	24077	37137	2.7	7.0E-88	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-48, and partial cds, alternatively spliced
1337	13931	26450	2.34	6.0E-88	4505492	NT	Homo sapiens oxoglutarate dehydrogenase (liponamide) (OGDH) mRNA
228	12888	25373	2.46	4.0E-88	BE547173.1	EST_HUMAN	601072594F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3458830 5'
6185	18785	31563	10.88	4.0E-88	BE295943.1	EST_HUMAN	601178855F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531933 5'
11120	12888	25373	1.88	4.0E-88	BE547173.1	EST_HUMAN	601072594F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3458830 5'
4377	16884	26410	0.84	3.0E-88	BE867703.1	EST_HUMAN	601443282F1 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:3847455 5'
5782	19407	31123	6.23	3.0E-88	AW340948.1	EST_HUMAN	z92h12.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2871719 3'
8205	20748	33658	1.15	3.0E-88	AV722329	EST_HUMAN	AV722329 HTB Homo sapiens cDNA clone HTB8SD04 5'
10121	22818	35608	3.12	3.0E-88	BE868479.1	EST_HUMAN	601508686F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911303 5'
10121	22818	35607	3.12	3.0E-88	BE868479.1	EST_HUMAN	601508686F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911303 5'
11312	23010	36018	10.83	3.0E-88	AB582240.1	EST_HUMAN	lu18b02.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2251371 3'
11808	24893		3.18	3.0E-88	BE410354.1	EST_HUMAN	601302333F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636783 5'
288	12944	25429	2.06	2.0E-88	AA306284.1	EST_HUMAN	EST177232 Jurkat T-cells VI Homo sapiens cDNA 5' end
439	13072		2.33	2.0E-88	N58877.1	NT	EST177232 Jurkat T-cells VI Homo sapiens cDNA 5' end
1232	13831	28345	2.16	2.0E-88	AL163203.2	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
2233	14808	27381	1.96	2.0E-88	8635487	NT	Human endogenous retrovirus, complete genome
3462	16089	28542	1.38	2.0E-88	AW866142.1	EST_HUMAN	EST378215 MAGe resequences, MAGI Homo sapiens cDNA
3809	16408	28872	2.89	2.0E-88	AF156778.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
3809	16408	28873	2.89	2.0E-88	AF156778.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
4113	16707		3.01	2.0E-88	AW515742.1	EST_HUMAN	hd87g08.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2816542 3'
4804	17479	29937	3.25	2.0E-88	AF058480.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
6032	18651	31382	1.55	2.0E-88	T64411.1	NT	H. sapiens mRNA encoding phospholipase c
6032	18651	31383	1.55	2.0E-88	T64411.1	NT	H. sapiens mRNA encoding phospholipase c
7134	24773	32284	0.88	2.0E-88	11419428	NT	Homo sapiens similar to ecdonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC83214), mRNA
7952	20494	33403	0.6	2.0E-88	UB4744.1	NT	Human Chediak-Higashi syndrome protein short isoform (LYST) mRNA, complete cds
8453	20883		0.54	2.0E-88	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
8509	21048	33989	2.19	2.0E-88	11437135	NT	Homo sapiens butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) (BBOX), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8509	21048	33870	2.19	2.0E-88	11437135	NT	Homo sapiens butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) (BBOX), mRNA
8834	21373	34288	1.28	2.0E-88	10883878	NT	Homo sapiens phospholipid scramblase 1 (PLSCR1), mRNA
8242	21768	34717	2.08	2.0E-88	11422084	NT	Homo sapiens chromosome segregation 1 (yeast homolog) like (CSE1L), mRNA
10344	22838	35833	2.82	2.0E-88	11545946	NT	Homo sapiens basic-helix-loop-helix-PAS protein (NPASS), mRNA
10344	22838	35834	2.82	2.0E-88	11545946	NT	Homo sapiens basic-helix-loop-helix-PAS protein (NPASS), mRNA
10347	22841	35837	1.85	2.0E-88	11417120	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20125), mRNA
10397	22891	35885	0.85	2.0E-88	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
10784	23308	36315	1.94	2.0E-88	47680651	NT	Homo sapiens ribosomal protein S8 kinase, 80kD, polypeptide 5 (RPS8KAS) mRNA
12289	24478	36835	3.82	2.0E-88	11418188	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (GZP1), mRNA
12452	24588		3.36	2.0E-88	AB011399.1	NT	Homo sapiens gene for AF-3, complete cds
1641	14233	28767	1.33	1.0E-88	48288855	NT	Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 1 (75kD) (NADH-coenzyme Q reductase) (NDUFS1) mRNA
3198	15810	28283	1.54	1.0E-88	5453848	NT	Homo sapiens fibulin 5 (FBLN5) mRNA
3272	15884	28368	3.1	1.0E-88	L20482.1	NT	Human gamma-glutamyl transpeptidase mRNA, complete cds
3335	15945	28420	1.24	1.0E-88	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
3335	15945	28421	1.24	1.0E-88	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
4018	16616	29090	0.98	1.0E-88	7708161	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
4018	16616	29091	0.98	1.0E-88	7708161	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
4351	16838	28380	5.98	1.0E-88	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
5042	17615	30058	0.9	1.0E-88	AF100751.1	NT	Homo sapiens FK506-binding protein FKBP23 isoform mRNA, complete cds
5741	18387	31074	1.62	1.0E-88	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5559	18191		1.72	9.0E-87	AI150703.1	EST_HUMAN	q577c08.x1 Scores: fetal heart_NH-H19W Homo sapiens cDNA clone IMAGE:1706128 3' similar to SW:K1CJ_MOUSE P02535 KERATIN, TYPE I CYTOSKELETAL 10 ;
7472	18894	32857	1.78	9.0E-87	4757721	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA
7472	18894	32858	1.78	9.0E-87	4757721	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA
505	13137	25825	84.06	8.0E-87	X62245.1	NT	O.cuniculus mRNA for elongation factor 1 alpha
2335	14908	27477	2.29	7.0E-87	BF063211.1	EST_HUMAN	785502.x1 NCI_CGAP_Co18 Homo sapiens cDNA clone IMAGE:3322779 3'
2335	14908	27478	2.29	7.0E-87	BF063211.1	EST_HUMAN	785502.x1 NCI_CGAP_Co18 Homo sapiens cDNA clone IMAGE:3322779 3'
8533	19133	31928	0.88	7.0E-87	AW880336.1	EST_HUMAN	MRO-NT0039-020500-004-rt11 NT0039 Homo sapiens cDNA
8130	20671	33581	2.87	7.0E-87	BF352776.1	EST_HUMAN	IL3-HT0619-080700-198-D10 HT0619 Homo sapiens cDNA
8375	20314	33210	0.97	7.0E-87	BE12981.1	EST_HUMAN	IL5-HT0702-180800-103-d08 HT0702 Homo sapiens cDNA
8083	22478	35460	3.7	7.0E-87	AL043314.2	EST_HUMAN	DKFZp434N0323_1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N0323 5'
8863	22478	35461	3.7	7.0E-87	AL043314.2	EST_HUMAN	DKFZp434N0323_1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N0323 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10770	23204	36289	11	7.0E-87	K03002.1	NT	Human mRNA from chromosome 15 gene with homology to MHC-HLA-SB-1 Intron A
10770	23294	36300	11	7.0E-87	K03002.1	NT	Human mRNA from chromosome 15 gene with homology to MHC-HLA-SB-1 Intron A
3578	16183	28665	0.82	6.0E-87	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
6553	19151	31847	1.54	6.0E-87	AB028004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
10603	23137		8.8	6.0E-87	11492444	NT	Homo sapiens similar to SET translocation (myeloid leukemia-associated) (H. sapiens) (LOC03102), mRNA
1200	13801	26313	2.58	5.0E-87	AA382811.1	EST_HUMAN	EST186094 Testis 1 Homo sapiens cDNA 5' end
12100	13801	26313	2.47	5.0E-87	AA382811.1	EST_HUMAN	EST186094 Testis 1 Homo sapiens cDNA 5' end
1001	13812	26126	0.85	4.0E-87	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1214	13814	26328	11.73	4.0E-87	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
1478	14088	26805	3.14	4.0E-87	R78133.1	EST_HUMAN	y80f10.1 Scores placenta Nib2-IP Homo sapiens cDNA clone IMAGE:145579 5' similar to contains Alu repetitive element
2468	15033	27589	2.57	4.0E-87	7706289	NT	Homo sapiens CGI-60 protein (LOC51626), mRNA
2468	15033	27600	2.57	4.0E-87	7706289	NT	Homo sapiens CGI-60 protein (LOC51626), mRNA
3511	16118	28595	1.82	4.0E-87	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
5439	17894		0.82	4.0E-87	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
5837	18268	30738	11.09	4.0E-87	O00321	SWISSPROT	ETS-RELATED PROTEIN 71 (ETS TRANSLOCATION VARIANT 2)
5925	18547	31273	0.72	4.0E-87	U85426.1	NT	Human transcription factor NFATX3 mRNA, complete cds
6106	18808	31575	4.42	4.0E-87	BE247284.1	EST_HUMAN	TCBAP1E4051 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP-4051
11044	23558	36604	5.04	4.0E-87	M80676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
11623	24065	37130	2.12	4.0E-87	11417339	NT	Homo sapiens similar to heat shock 70kD protein 88 (mortalin-2) (H. sapiens) (LOC83184), mRNA
12202	24947	30623	1.81	4.0E-87	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12202	24947	30624	1.81	4.0E-87	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12371	24541		17.18	4.0E-87	11417812	NT	Homo sapiens putative receptor P2X-like 1, orphan receptor (P2RXL1), mRNA
2805	15357	27824	2.34	2.0E-87	4885420	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 4 (HMG4) mRNA
2875	15591		1.1	2.0E-87	BF327820.1	EST_HUMAN	QV0-BN0148-050600-254-a03 BN0148 Homo sapiens cDNA
3652	18450	26913	0.78	2.0E-87	AU116835.1	EST_HUMAN	AU116835 HEMBA1 Homo sapiens cDNA clone HEMBA1000307 5'
5039	17812	30058	0.6	2.0E-87	BF376311.1	EST_HUMAN	CMO-TN0038-160900-552-H08 TN0038 Homo sapiens cDNA
5842	18466	31191	12.69	2.0E-87	BE734180.1	EST_HUMAN	601569041F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3843730 5'
5842	18466	31182	12.69	2.0E-87	BE734180.1	EST_HUMAN	601569041F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3843730 5'
6468	19069		6.41	2.0E-87	BE567183.1	EST_HUMAN	601341383F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3683348 5'
6800	19391	32206	2.12	2.0E-87	N48126.1	EST_HUMAN	y21607.1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:243396 5'

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6877	18611	32444	0.93	2.0E-87	AV654143.1	EST_HUMAN	AV654143 GLC Homo sapiens cDNA clone GLODSG04 3'
7225	18758	32811	1.43	2.0E-87	BE294432.1	EST_HUMAN	601176032F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531511 5'
7277	18805	32884	0.78	2.0E-87	11433048	NT	Homo sapiens hct domain and RLD 2 (HERC2), mRNA
7476	18888	32863	31.97	2.0E-87	N48128.1	EST_HUMAN	yw21e07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:243398 5'
7676	20187	33075	33.12	2.0E-87	N48128.1	EST_HUMAN	yw21e07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:243398 5'
8334	20875	33797	15.53	2.0E-87	X52851.1	NT	Human cyclophilin gene for cyclophilin (EC 5.2.1.8)
9700	22169		5.14	2.0E-87	BE531136.1	EST_HUMAN	601278315F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3610539 5'
1224	15392		1.66	1.0E-87	7705883	NT	Homo sapiens putative glycolipid transfer protein (LOC51054), mRNA
1478	14070	26607	1.21	1.0E-87	AW361977.1	EST_HUMAN	PM2-CT0265-141099-001-g04 CT0265 Homo sapiens cDNA
1478	14070	26608	1.21	1.0E-87	AW361977.1	EST_HUMAN	PM2-CT0265-141099-001-g04 CT0265 Homo sapiens cDNA
3772	16373	26838	6.15	1.0E-87	Y00052.1	NT	Human mRNA for T-cell cyclophilin
3768	16398	26861	2.65	1.0E-87	4758827	NT	Homo sapiens neuritin III (NRN3) mRNA
5283	17845	30272	1.14	1.0E-87	U50949.1	NT	Rattus norvegicus taste bud receptor protein TB 641 (TB 641) gene, complete cds
6374	18978	31756	2.17	1.0E-87	AF073371.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 8
6374	18978	31757	2.17	1.0E-87	AF073371.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 8
7229	19760	32816	0.72	1.0E-87	AF039517.1	NT	Homo sapiens corticotropin-releasing factor type 1 receptor gene, exon 8
7229	19760	32816	0.72	1.0E-87	AF039517.1	NT	Homo sapiens corticotropin-releasing factor type 1 receptor gene, exon 8
7235	19765	32821	1	1.0E-87	4506788	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1) mRNA
7430	18964	32819	1.18	1.0E-87	11431590	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
8059	20901	33511	10.74	1.0E-87	AF214562.1	NT	Homo sapiens tracheal epithelium enriched protein (PLUNC) gene, complete cds
8840	21378	34302	1.01	1.0E-87	AB022818.1	NT	Homo sapiens mRNA for alpha2,3-sialyltransferase ST3Gal VI, complete cds
8840	21379	34303	1.01	1.0E-87	AB022818.1	NT	Homo sapiens mRNA for alpha2,3-sialyltransferase ST3Gal VI, complete cds
9551	22051	35013	3.71	1.0E-87	BE818183.1	EST_HUMAN	RC8-BN0278-050700-012-E02 BN0278 Homo sapiens cDNA
9551	22051	35014	3.71	1.0E-87	BE818183.1	EST_HUMAN	RC8-BN0278-050700-012-E02 BN0278 Homo sapiens cDNA
10276	22770	35758	0.89	1.0E-87	M34426.1	NT	Human L-plastin mRNA, 5' end
10611	23144	36155	2.84	1.0E-87	5728867	NT	Homo sapiens hct domain and RLD 2 (HERC2), mRNA
10878	23399		1.82	1.0E-87	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
12188	25068		2.92	1.0E-87	7657832	NT	Homo sapiens sulfotransferase-related protein (SULTX3), mRNA
955	13567	26081	5.21	9.0E-88	5453887	NT	Homo sapiens proteinase inhibitor 4 (kallistatin) (PI4) mRNA
1145	13748	26257	8.79	9.0E-88	AF167465.1	NT	Homo sapiens double stranded RNA activated protein kinase (PKR) gene, exon 12
1393	13987	26514	2.74	9.0E-88	AB037820.1	NT	Homo sapiens mRNA for KIAA1398 protein, partial cds
1393	13987	26515	2.74	9.0E-88	AB037820.1	NT	Homo sapiens mRNA for KIAA1398 protein, partial cds
3689	16280	28759	1.7	9.0E-88	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
4358	16943	29385	3.11	9.0E-88	X31929.1	NT	H. sapiens ECE-1 gene (exon 9)

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4356	16943	280388	3.11	9.0E-88	X81829.1	NT	H. sapiens ECE-1 gene (exon 9)
5146	17716	30147	1.11	9.0E-88	AB026998.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
8951	21489	34412	3.16	8.0E-88	AF003528.1	NT	Homo sapiens X-linked arylidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
1688	14454		0.98	5.0E-88	7681887	NT	Homo sapiens KIAA0063 gene product (KIAA0063), mRNA
2688	15224	27797	2.31	5.0E-88	N89389.1	EST_HUMAN	K9718F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K9719 5' similar to ZINC FINGER PROTEIN HZF1
3031	15847	28125	0.77	5.0E-88	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
3044	15880	28140	0.81	5.0E-88	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
3044	15880	28141	0.81	5.0E-88	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
3436	18044		2.91	5.0E-88	AI883217.1	EST_HUMAN	wd8808.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2336789 3' similar to contains Alu repetitive element/contains element MER22 MER22 repetitive element;
3588	16192	28876	0.76	5.0E-88	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
4843	17421	29874	0.79	5.0E-88	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
6888	18602	32434	2.89	5.0E-88	H10832.1	EST_HUMAN	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
7870	20412	33318	1.73	5.0E-88	AL163284.2	NT	ym086.10.11 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:47128 5'
8238	21762	34708	0.54	5.0E-88	BF680206.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C084
11942	14454		1.37	5.0E-88	7681887	NT	602154958F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4295775 5'
1374	13988	28495	1.83	4.0E-88	BF091229.1	EST_HUMAN	Homo sapiens KIAA0063 gene product (KIAA0063), mRNA
1374	13988	28498	1.93	4.0E-88	BF091229.1	EST_HUMAN	PM1-TN0028-050800-004-F10 TN0028 Homo sapiens cDNA
7292	19820	32879	2.25	4.0E-88	11416585	NT	PM1-TN0028-050800-004-F10 TN0028 Homo sapiens cDNA
10788	23312	36320	1.93	4.0E-88	4502894	NT	Homo sapiens transforming growth factor, beta-induced, 688D (TGFB1), mRNA
11382	23814	36874	2.42	4.0E-88	7681947	NT	Homo sapiens cell division cycle 10 (homologous to CDC10 of S. cerevisiae) (CDC10) mRNA
11382	23814	36875	2.42	4.0E-88	7681947	NT	Homo sapiens KIAA0152 gene product (KIAA0152), mRNA
761	13380	25877	0.96	3.0E-88	11545800	NT	Homo sapiens KIAA0152 gene product (KIAA0152), mRNA
1848	14438		2.59	3.0E-88	4508020	NT	Homo sapiens zinc finger protein 258 (ZNF258) mRNA
2974	15580	28073	4.76	3.0E-88	N66851.1	EST_HUMAN	2a4812.a1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:295823 3'
4325	16911	29352	0.64	3.0E-88	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
4325	16911	29353	0.64	3.0E-88	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
4578	17159		4.33	3.0E-88	11429300	NT	Homo sapiens hypothetical protein FLJ21634 (FLJ21634), mRNA
5502	18136	30546	2.95	3.0E-88	11429567	NT	Homo sapiens zinc finger protein 258 (ZNF258) mRNA
5773	18398	31112	4.24	3.0E-88	8666888	NT	Homo sapiens v-src similar leukemia viral oncogene homolog A (src related) (RALA), mRNA
5882	18504	31230	3.86	3.0E-88	11420687	NT	Homo sapiens v-src similar leukemia viral oncogene homolog A (src related) (RALA), mRNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6308	18916	31690	1.3	3.0E-88	11417370	NT	Homo sapiens Interleukin 13 (IL13), mRNA
6545	24784	31838	0.99	3.0E-88	11418210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
6545	24784	31839	0.99	3.0E-88	11418210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
7125	19465	32283	15.2	3.0E-88	AF279266.1	NT	Homo sapiens putative anion transporter 1 mRNA, complete cds
7546	20068	32840	5.75	3.0E-88	11436400	NT	Homo sapiens retinoblastoma-binding protein 2 (RBBP2), mRNA
7881	20403	33310	9.25	3.0E-88	11421728	NT	Homo sapiens growth differentiation factor 5 (cartilage-derived morphogenetic protein-1) (GDF5), mRNA
8137	20878	33589	1.57	3.0E-88	AF034374.1	NT	Homo sapiens myoblastum cofactor biosynthesis protein A and myoblastum cofactor biosynthesis protein C mRNA, complete cds
9355	20284	33183	2.09	3.0E-88	11628282	NT	Homo sapiens v-cis avian erythroblastosis virus E26 oncogene related (ERG), mRNA
9841	22339	35320	0.67	3.0E-88	AB015228.1	NT	Homo sapiens mRNA for RALDH2-T, complete cds
9841	22339	35321	0.67	3.0E-88	AB015228.1	NT	Homo sapiens mRNA for RALDH2-T, complete cds
9867	22364	35343	0.89	3.0E-88	11439065	NT	Homo sapiens acyl-Coenzyme A dehydrogenase family, member 8 (ACAD8), mRNA
11928	24263	30628	5.36	3.0E-88	11417974	NT	Homo sapiens transcobalamin II; macrocytic anemia (TCN2), mRNA
11944	24954	30628	1.26	3.0E-88	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12669	24738	30826	1.41	3.0E-88	11528140	NT	Homo sapiens protease, serine, 7 (serine protease) (PRSS7), mRNA
1074	13678	28188	1.87	2.0E-88	7305198	NT	Homo sapiens Cathepsin L, procathepsin-binding protein, EF hand transcription factor (CSEN), mRNA
1685	14258	28782	1.57	2.0E-88	AF248219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
1786	14376	28920	4.58	2.0E-88	AF248219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
4516	17100	29547	2.07	2.0E-88	5031666	NT	Homo sapiens dynein, axonemal, light polypeptide 4 (DNAL4), mRNA
6070	18687	31430	5.11	1.0E-88	AW139595.1	EST_HUMAN	UI-H-B11-ess-d-04-0-UI.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2718750 3'
6070	18687	31431	5.11	1.0E-88	AW139595.1	EST_HUMAN	UI-H-B11-ess-d-04-0-UI.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2718750 3'
6753	18346	32153	22.7	1.0E-88	AB007877.1	NT	Homo sapiens KIAA0417 mRNA, complete cds
6753	18346	32154	22.7	1.0E-88	AB007877.1	NT	Homo sapiens KIAA0417 mRNA, complete cds
7176	19708	32558	1.3	1.0E-88	AI989034.1	EST_HUMAN	Homo sapiens KIAA0417 mRNA, complete cds
7236	19766	32622	4.05	1.0E-88	AA488981.1	EST_HUMAN	W70812.X1 NCI_CGAP_G03 Homo sapiens cDNA clone IMAGE:2476606 3'
9168	21743	34686	0.9	1.0E-88	AA180368.1	EST_HUMAN	aa54e11.s1 NCI_CGAP_G03 Homo sapiens cDNA clone IMAGE:824732 3' similar to WP:80272.2 CEE00851 ;
9469	21869	34956	3.09	1.0E-88	AL043314.2	EST_HUMAN	2p87c02.11 Stragene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:827170 5' similar to SW:POL1_HUMAN P10288 RETROVIRUS-RELATED POL POL YPROTEIN ;
11319	23017	36026	8.14	1.0E-88	AA991478.1	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N0323 5'
12160	24400		5.36	1.0E-88	AL163246.2	NT	-cs91g03.s1 NCI_CGAP_G03 Homo sapiens cDNA clone IMAGE:1612756 3' similar to gb:M16342 HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEINS C1/C2 (HUMAN);
10830	23351	36366	3.56	9.0E-89	11421238	NT	Homo sapiens chromosome 21 segment HS21C046
							Homo sapiens transgelin 2 (TAGLN2), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2763	15317	27884	1.05	8.0E-89	BE311557.1	EST_HUMAN	601142409F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3506188 5'
7012	19510	32331	1.07	8.0E-89	11421514	NT	Homo sapiens similar to sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3A (H. sapiens) (LOC33232), mRNA
458	13092	25585	1.28	7.0E-89	7657213	NT	Homo sapiens hormonally upregulated new tumor-associated kinase (HUNK), mRNA
458	13092	25588	1.28	7.0E-89	7657213	NT	Homo sapiens hormonally upregulated new tumor-associated kinase (HUNK), mRNA
6012	17588	30029	2.51	7.0E-89	4557390	NT	Homo sapiens complement component 8, beta polypeptide (C8B), mRNA
5064	17637	30080	6.15	7.0E-89	AL045748.1	EST_HUMAN	DKFZp434E248_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434E248 5'
5623	18252	30720	1.28	7.0E-89	X98832.1	NT	H. sapiens CLN3 gene, complete CDS
6623	18252	30721	1.28	7.0E-89	X98832.1	NT	H. sapiens CLN3 gene, complete CDS
6483	19084	31865	1.06	7.0E-89	7549808	NT	Homo sapiens plasmin 3 (T isoform) (PLS3), mRNA
6483	19084	31866	1.06	7.0E-89	7549808	NT	Homo sapiens plasmin 3 (T isoform) (PLS3), mRNA
7510	20031	32898	1.96	7.0E-89	11420754	NT	Homo sapiens actin related protein 2/3 complex, subunit 1A (41 kD) (ARPC1A), mRNA
7820	20362	33268	0.51	7.0E-89	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
7820	20362	33270	0.51	7.0E-89	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
8415	20955	33872	0.83	7.0E-89	J02923.1	NT	Human 65-kilodalton phosphoprotein (p65) mRNA, complete cds
10423	22917	35917	1.3	7.0E-89	X62048.1	NT	H. sapiens Wee1 hu gene
10423	22917	35918	1.3	7.0E-89	X62048.1	NT	H. sapiens Wee1 hu gene
10440	22934	35942	0.97	7.0E-89	AB020630.1	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
10440	22934	35943	0.97	7.0E-89	AB020630.1	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
12604	24905		1.89	7.0E-89	J05235.1	NT	Homo sapiens gamma-glutamyl transpeptidase mRNA, complete cds
1061	13886	28177	1.41	6.0E-89	5803114	NT	Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA
2254	14828	27404	1.24	6.0E-89	4506124	NT	Homo sapiens serine/threonine-protein kinase PRP4 homolog (PRP4) mRNA
2477	15044	27611	1.37	6.0E-89	4507788	NT	Homo sapiens ubiquitin-conjugating enzyme E2L3 (UBE2L3) mRNA
2477	15044	27612	1.37	6.0E-89	4507788	NT	Homo sapiens ubiquitin-conjugating enzyme E2L3 (UBE2L3) mRNA
3577	16181	28683	0.91	6.0E-89	7681817	NT	Homo sapiens HSPC156 protein (HSPC156), mRNA
4743	17324	28765	3	6.0E-89	AB007868.2	NT	Homo sapiens mRNA for KIAA0408 protein, partial cds
4743	17324	28766	3	6.0E-89	AB007868.2	NT	Homo sapiens mRNA for KIAA0408 protein, partial cds
5366	17926	30340	0.82	6.0E-89	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
5366	17926	30341	0.82	6.0E-89	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
5234	17798	30216	2.68	5.0E-89	BE244323.1	EST_HUMAN	TCBAP2E0383 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP0383
5234	17798	30217	2.68	5.0E-89	BE244323.1	EST_HUMAN	TCBAP2E0383 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP0383
7587	20102	32977	0.91	4.0E-89	BE762749.1	EST_HUMAN	QV3-NT0022-080800-219-g03 NT0022 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11020	23534	38570	1.89	4.0E-89	A1708672.1	EST_HUMAN	w601c03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2348452 3'
2801	15518	27988	2.21	3.0E-89	AW976181.1	EST_HUMAN	EST388280 MAGE resequences, MAGN Homo sapiens cDNA
7184	19725	32575	1.5	3.0E-89	A1217359.1	EST_HUMAN	qh17b06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1844916 3'
10678	23210	38221	2.24	3.0E-89	N57357.1	EST_HUMAN	yw66e11.r1 Soares_placenta_86c6weeks_2NhtIP86c9W Homo sapiens cDNA clone IMAGE:259148 5'
12270	24840	30799	2.82	3.0E-89	AV708431.1	EST_HUMAN	similar to SW:P14K_HUMAN P42356 PHOSPHATIDYLINOSITOL 4-KINASE ALPHA ;
12364	24537	30802	1.32	3.0E-89	AV705749.1	EST_HUMAN	AV708431 ADC Homo sapiens cDNA clone ADCARE02 5'
132	13066	25561	0.74	2.0E-89	7706870	NT	AV705749 ADB Homo sapiens cDNA clone ADBBGA01 5'
132	13066	25562	0.74	2.0E-89	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
433	13066	25561	0.65	2.0E-89	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
433	13066	25562	0.65	2.0E-89	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
1826	14415	26982	1.71	2.0E-89	AJ238277.1	NT	Homo sapiens mRNA for cancer-testis-associated protein (CTP11 gene)
2805	15522	27982	1.84	2.0E-89	A1222095.1	EST_HUMAN	qg86c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131
3608	16212	28691	0.67	2.0E-89	AA759149.1	EST_HUMAN	GAMMA-GLUTAMYL TRANSPEPTIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element
3608	16212	28682	0.67	2.0E-89	AA759149.1	EST_HUMAN	ah70e03.s1 Soares_testis_NHT Homo sapiens cDNA clone 1320988 3'
4226	16814	28261	1.18	2.0E-89	AF089897.1	NT	ah70e03.s1 Soares_testis_NHT Homo sapiens cDNA clone 1320988 3'
4233	16821	28271	5.23	2.0E-89	X58742.1	NT	Homo sapiens topoisomerase-related function protein (TRF4-2) mRNA, partial cds
4233	16821	28272	5.23	2.0E-89	X58742.1	NT	H.sapiens HCK gene for tyrosine kinase (PTK), exons 10-11
4441	17027	28467	0.7	2.0E-89	AL163203.2	NT	H.sapiens HCK gene for tyrosine kinase (PTK), exons 10-11
4598	17179	29828	1.52	2.0E-89	AJ007378.1	NT	Homo sapiens chromosome 21 segment HS21C003
5546	18178		1.07	2.0E-89	BE541744.1	EST_HUMAN	Homo sapiens GGT gene, exon 5
5572	18289	30780	3.13	2.0E-89	AB007546.1	NT	601065690F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3452423 5'
5680	18582	31316	1.44	2.0E-89	U03085.1	NT	Homo sapiens gene for LECT2, complete cds
6358	18982	31738	0.7	2.0E-89	AL163285.2	NT	Human N-ethylmaleimide-sensitive factor mRNA, partial cds
7604	20176	33063	4.46	2.0E-89	U81004.1	NT	Homo sapiens chromosome 21 segment HS21C085
							Human GT24 (GT24) mRNA, partial cds
7875	20417	33325	3.22	2.0E-89	11428801	NT	Homo sapiens solute carrier family 24 (sodium/potassium/calcium exchanger), member 2 (SLC24A2), mRNA
8356	20886	33816	1	2.0E-89	AJ245503.1	NT	Homo sapiens partial mRNA for PEX5-related protein
9177	21754	34701	0.69	2.0E-89	AB037754.1	NT	Homo sapiens partial mRNA for PEX5-related protein
9724	22222	35197	0.65	2.0E-89	AF170814.1	NT	Homo sapiens mRNA for KIAA1333 protein, partial cds
9724	22222	35198	0.65	2.0E-89	AF170814.1	NT	Homo sapiens CaBP5 (CABP5) gene, exon 5
							Homo sapiens CaBP5 (CABP5) gene, exon 5

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11252	23762	36838	2.58	2.0E-89	11434411	NT	Homo sapiens Integrin, alpha 3 (antigen CD49C, alpha 3 subunit of VLA-3 receptor) (ITGA3), mRNA
11444	23804	36959	5.1	2.0E-89	11433873	NT	Homo sapiens cell adhesion molecule with homology to L1CAM (close homologue of L1) (CHL1), mRNA
11584	24011	37081	2.25	2.0E-89	U10692.1	NT	Human IMAGE-7 antigen (IMAGE7) pseudogene, complete cds
11448	23888	36985	8.8	1.0E-89	BF186052.1	EST_HUMAN	h81609.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134897 3' similar to TR:O54778 O54778
11449	23889	36986	8.8	1.0E-89	BF186052.1	EST_HUMAN	SOLUTE CARRIER FAMILY 22 -LUKE 2 PROTEIN ;
8169	20710	33628	1.59	9.0E-80	AL163246.2	NT	h81609.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134897 3' similar to TR:O54778 O54778
8169	20710	33627	1.59	9.0E-80	AL163246.2	NT	SOLUTE CARRIER FAMILY 22 -LUKE 2 PROTEIN ;
1101	13706	26214	1.9	8.0E-80	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1102	13706	26214	2.3	8.0E-80	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1375	15439	28497	4.58	8.0E-80	BE870561.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
1375	15439	28498	4.58	8.0E-80	BE870561.1	EST_HUMAN	7636108.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284583 3'
8485	21034	33955	0.88	8.0E-80	BE177830.1	EST_HUMAN	7636108.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284583 3'
10579	23114	36127	1.61	8.0E-80	A1222095.1	EST_HUMAN	RC1-HT0568-120400-022-608 HT0568 Homo sapiens cDNA
10579	23114	36128	1.61	8.0E-80	A1222095.1	EST_HUMAN	qg88c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131
889	13484		4.46	7.0E-80	AF223391.1	NT	GAMMA-GLUTAMYL TRANSPEPTIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element
8363	20603		1.79	7.0E-80	AA762977.1	EST_HUMAN	qg88c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131
8898	21434	34357	1.47	7.0E-80	BE962525.2	EST_HUMAN	GAMMA-GLUTAMYL TRANSPEPTIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element
8898	21434	34358	1.47	7.0E-80	BE962525.2	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
10042	22537	35533	2.15	7.0E-80	H68849.1	EST_HUMAN	af83408.s1 Soares_testis_NHT Homo sapiens cDNA clone 1375503 3'
10042	22537	35534	2.15	7.0E-80	H68849.1	EST_HUMAN	601655837R1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3855824 3'
10352	22846	35840	0.89	7.0E-80	BF526089.1	EST_HUMAN	601655837R1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3855824 3'
3104	15719	28189	1.18	6.0E-80	X91928.1	NT	y88c04.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:212190 3' similar to
3104	15719	28189	1.18	6.0E-80	X91928.1	NT	SP:C1TC_HUMAN P11586 C-1-TETRAHYDROFOLATE SYNTHASE, CYTOPLASMIC ;
							y88c04.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:212190 3' similar to
							SP:C1TC_HUMAN P11586 C-1-TETRAHYDROFOLATE SYNTHASE, CYTOPLASMIC ;
							602071208F1 NCI_CGAP_Brm64 Homo sapiens cDNA clone IMAGE:4214257 5'
							H.sapiens ECE-1 gene (exon 6)
							H.sapiens ECE-1 gene (exon 6)

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4311	16897	28341	8.08	6.0E-60	8922398	NT	Homo sapiens hypothetical protein FLJ10388 (FLJ10388), mRNA
4311	16897	28342	8.08	6.0E-60	8922398	NT	Homo sapiens hypothetical protein FLJ10388 (FLJ10388), mRNA
6137	18751	31508	3.08	6.0E-60	U77700.1	NT	Homo sapiens HsGCN1 mRNA, partial cds
6137	18751	31509	3.08	6.0E-60	U77700.1	NT	Homo sapiens HsGCN1 mRNA, partial cds
8289	20810	33730	3.18	6.0E-60	4504794	NT	Homo sapiens Inositol 1,4,5-trisphosphate receptor, type 3 (ITPR3) mRNA
8289	20810	33731	3.18	6.0E-60	4504794	NT	Homo sapiens Inositol 1,4,5-trisphosphate receptor, type 3 (ITPR3) mRNA
106	12828		24.28	5.0E-60	AB035344.1	NT	Homo sapiens TGL6 gene, exon 1-10b
1234	13833	28347	2.38	5.0E-60	U80226.1	NT	Human gamma-aminobutyric acid transaminase mRNA, partial cds
1858	14446	27002	2.57	5.0E-60	A1222085.1	EST_HUMAN	q98c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131 GAVMA-GLUTAMYL TRANSPEPTIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element;
1858	14446	27003	2.57	5.0E-60	A1222085.1	EST_HUMAN	q98c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131 GAVMA-GLUTAMYL TRANSPEPTIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element;
2591	15153	27720	4.08	5.0E-60	AF114487.1	NT	Homo sapiens intersecin long isoform (ITSN) mRNA, complete cds
4638	17220	28874	10.01	5.0E-60	4506354	NT	Homo sapiens pregnancy-zone protein (PZP) mRNA
4660	17242	28886	0.64	5.0E-60	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
5777	18402	31118	2.63	5.0E-60	Z16411.1	NT	H. sapiens mRNA encoding phospholipase c
5871	18483	31220	1.13	5.0E-60	AB015617.1	NT	Homo sapiens ELKS mRNA, complete cds
5838	18402	31118	2.21	5.0E-60	Z16411.1	NT	H. sapiens mRNA encoding phospholipase c
7267	19795	32651	2.56	5.0E-60	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG4) mRNA, partial cds
7267	19795	32652	2.56	5.0E-60	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG4) mRNA, partial cds
7564	20081	32957	13.89	5.0E-60	4557258	NT	Homo sapiens adenylate cyclase 9 (ADCY9) mRNA
8284	20775	33697	4.57	5.0E-60	11345483	NT	Homo sapiens hypothetical protein FLJ13222 (FLJ13222), mRNA
9588	22088	35061	1.24	5.0E-60	11418428	NT	Homo sapiens similar to ectorucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC83214), mRNA
10181	22676	35669	0.71	5.0E-60	AF123303.1	NT	Homo sapiens calcium-binding transporter mRNA, partial cds
10311	22805	35797	0.53	5.0E-60	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10311	22805	35788	0.53	5.0E-60	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10343	22837	35832	8.78	5.0E-60	11433721	NT	Homo sapiens ATPase, aminophospholipid transporter-like, Class 1, type 8A, member 2 (ATP8A2), mRNA
10389	22883	35887	0.51	5.0E-60	7862051	NT	Homo sapiens KIAA0317 gene product (KIAA0317), mRNA
10389	22883	35888	0.51	5.0E-60	7862051	NT	Homo sapiens KIAA0317 gene product (KIAA0317), mRNA
10785	23318	36328	3.38	5.0E-60	D49387.1	NT	Human mRNA for NADP dependent leukotriene b4 12-hydroxydehydrogenase, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12421	24607		1.0	5.0E-00	AB011398.1	NT	Homo sapiens gene for AF-8, complete cds
12471	24598		5.4	5.0E-00	A1523366.1	EST_HUMAN	af78f05.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2128761 3'
324	12678	25468	1.61	4.0E-00	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
324	12678	25467	1.61	4.0E-00	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
1125	13728	26239	4.34	4.0E-00	4505316	NT	Homo sapiens chromosome 21 unknown mRNA
1727	14318	26881	8.55	4.0E-00	X89003.1	NT	Homo sapiens myosin phosphatase, target subunit 1 (MYPT1), mRNA
3024	15640	28117	0.97	4.0E-00	A007544.1	NT	H. sapiens gene encoding discoidin receptor tyrosine kinase, exon 16
4781	17342	29780	3.77	4.0E-00	D87675.1	NT	Homo sapiens prostate-specific membrane antigen (PSM) gene, complete cds
4915	17490	29844	2.2	4.0E-00	AB033070.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4943	17518	29860	1.62	4.0E-00	M85987.1	NT	Homo sapiens mRNA for KIAA1244 protein, partial cds
6098	17669		0.7	3.0E-00	A1370786.1	EST_HUMAN	Human prothormone converting enzyme (NEC2) gene, exon 8
7784	20337	33244	1.07	3.0E-00	BF516168.1	EST_HUMAN	q289408.x1 Soares_pregnant_uterus_NIH-FPU Homo sapiens cDNA clone IMAGE:2041743 3' similar to gb:M31470 RAS-LIKE PROTEIN TC10 (HUMAN);
7784	20337	33245	1.07	3.0E-00	BF516168.1	EST_HUMAN	UIH-BW1-ary-b-04-0-UI.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083639 3'
11491	23940	37011	33.84	3.0E-00	BE563833.1	EST_HUMAN	UIH-BW1-ary-b-04-0-UI.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083639 3'
230	12890	26378	4.32	2.0E-00	BE537913.1	EST_HUMAN	601335244F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3689147 5'
1215	13815	26328	16.29	2.0E-00	5031748	NT	601087378F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3453834 5'
1215	13815	26330	16.29	2.0E-00	5031748	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
2420	14888		1.78	2.0E-00	4505052	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
3912	16510	28972	2.37	2.0E-00	A1138213.1	EST_HUMAN	Homo sapiens lymphocyte antigen 75 (LY75) mRNA, and translated products
4788	17378	29827	1.18	2.0E-00	AB006827.1	NT	qc35402.x1 Soares_placenta_8to6weeks_2NHP806W Homo sapiens cDNA clone IMAGE:1713410 3' similar to SW:OLF3_MOUSE P23275 OLFACTORY RECEPTOR OR3.;
5035	17809	30053	10.95	2.0E-00	5728855	NT	Homo sapiens mRNA for KIAA0289 gene, partial cds
5948	18568	31300	0.72	2.0E-00	11525801	NT	Homo sapiens GRB2-related adaptor protein (GRAP) mRNA
5948	18568	31301	0.72	2.0E-00	11525801	NT	Homo sapiens Rap2 interacting protein 8 (RPIP8), mRNA
5955	18577	31311	4.78	2.0E-00	AW672686.1	EST_HUMAN	Homo sapiens Rap2 interacting protein 8 (RPIP8), mRNA
9705	22204	35176	8.36	2.0E-00	11427320	NT	bc49d05.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2898881 5' similar to TR:075208 O75208 HYPOTHETICAL 35.5 KD PROTEIN.;
9705	22204	35177	8.36	2.0E-00	11427320	NT	Homo sapiens similar to laminin receptor 1 (67kD, ribosomal protein SA) (H. sapiens) (LOC63484), mRNA
9870	22367	35344	0.92	2.0E-00	AU118985.1	EST_HUMAN	Homo sapiens similar to laminin receptor 1 (67kD, ribosomal protein SA) (H. sapiens) (LOC63484), mRNA
9870	22367	35345	0.92	2.0E-00	AU118985.1	EST_HUMAN	AU118985 HEMBA1 Homo sapiens cDNA clone HEMBA1004795 5'
11345	23043	36053	4.12	2.0E-00	11024711	NT	AU118985 HEMBA1 Homo sapiens cDNA clone HEMBA1004795 5'
							Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
288	12854	25443	3.2	1.0E-60	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant), Alzheimer disease (APP), mRNA
397	15386	25533	2.02	1.0E-60	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
398	15388	25533	1.38	1.0E-60	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
724	13344	25835	1.49	1.0E-60	AJ237589.1	NT	Homo sapiens mRNA for T-box transcription factor (TBX20 gene), partial
724	13344	25838	1.49	1.0E-60	AJ237589.1	NT	Homo sapiens mRNA for T-box transcription factor (TBX20 gene), partial
759	13378	25874	13.32	1.0E-60	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
759	13378	25875	13.32	1.0E-60	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1149	13752		3.05	1.0E-60	4507828	NT	Homo sapiens Kruppel-like factor 7 (ubiquitous) (KLF7), mRNA
1349	13944	28467	2.46	1.0E-60	AF088154.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 3
1349	13944	28468	2.46	1.0E-60	AF088154.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 3
1707	14300		1.38	1.0E-60	BE379884.1	EST_HUMAN	601159503F2 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:351118 5'
1848	14530	27086	2.82	1.0E-60	11420514	NT	Homo sapiens similar to SALL1 (sal (Drosophila)-like (LOC57187), mRNA
2878	15498	27967	7.6	1.0E-60	8005720	NT	Homo sapiens chromosome 8 open reading frame 2 (C8ORF2), mRNA
3918	16518	28980	0.98	1.0E-60	AB020710.1	NT	Homo sapiens mRNA for KIAA0803 protein, partial cds
3918	16518	28981	0.98	1.0E-60	AB020710.1	NT	Homo sapiens mRNA for KIAA0803 protein, partial cds
4514	17088	28545	1.84	1.0E-60	AF167340.1	NT	Homo sapiens soluble interleukin 1 receptor accessory protein (IL1RAP) gene, exon 8, alternative exons 9 and complete cds, alternatively spliced
5855	18478	31201	1.98	1.0E-60	AB014533.1	NT	Homo sapiens mRNA for KIAA0833 protein, partial cds
6002	18922	31357	0.85	1.0E-60	11428910	NT	Homo sapiens KIAA0823 gene product (KIAA0823), mRNA
7133	19473	32283	0.68	1.0E-60	U91894.1	NT	Human retina-derived POU-domain factor-1 mRNA, complete cds
7685	20177	33084	2.52	1.0E-60	11428768	NT	Homo sapiens solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 (SLC1A6), mRNA
8755	21284	34214	4.17	1.0E-60	11422086	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
9217	21734		0.97	1.0E-60	AF163884.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
9239	21765	34712	1.33	1.0E-60	11422109	NT	Homo sapiens CGI-15 protein (LOC51006), mRNA
9239	21765	34713	1.33	1.0E-60	11422109	NT	Homo sapiens CGI-15 protein (LOC51006), mRNA
4274	18960	29309	8.54	8.0E-91	D12234.1	EST_HUMAN	HUM0005381 Liver HepG2 cell line. Homo sapiens cDNA clone s381 3'
8248	20789	33708	2.74	7.0E-91	11419234	NT	Homo sapiens maktorn, ring finger protein, 1 (MKRN1), mRNA
10201	22686	35680	0.74	7.0E-91	A904151.1	EST_HUMAN	CH4BT043-080289-075 BT043 Homo sapiens cDNA
3521	18128	28808	1.52	5.0E-91	AA702794.1	EST_HUMAN	2880504.s1 Soares_fetal_liver_spleen_1N1FLS_S1 Homo sapiens cDNA clone IMAGE:448015 3'
4614	17187	28843	1.21	6.0E-91	AU143539.1	EST_HUMAN	AU143539 Y78AA1 Homo sapiens cDNA clone Y78AA1002087 5'
4614	17187	28844	1.21	5.0E-91	AU143539.1	EST_HUMAN	AU143539 Y78AA1 Homo sapiens cDNA clone Y78AA1002087 5'
4931	17506	28852	0.68	5.0E-91	7110834	NT	Homo sapiens chromosome 22 open reading frame 5 (C22ORF5), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4931	17508	28953	0.68	5.0E-01	7110634	NT	Homo sapiens chromosome 22 open reading frame 5 (C22ORF5), mRNA
6729	19323	32128	1.08	5.0E-01	A1879995.1	EST_HUMAN	al49709.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2518121 3' similar to SW/ASPG_FLAME Q47898 N4-(BETA-N-ACETYLGLUCOSAMINY)-L-ASPARAGINASE PRECURSOR;
8147	20888	33601	1.52	5.0E-01	BF314682.1	EST_HUMAN	601801624F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4130833 5'
8695	21234	34155	1.4	5.0E-01	AV649878.1	EST_HUMAN	AV649878 GLC Homo sapiens cDNA clone GLC8YF08 3'
8695	21234	34156	1.4	5.0E-01	AV649878.1	EST_HUMAN	AV649878 GLC Homo sapiens cDNA clone GLC8YF08 3'
12443	24579		1.78	5.0E-01	A1893586.1	EST_HUMAN	q97011.x1 Soares_fetal_lung_NHL19W Homo sapiens cDNA clone IMAGE:1744365 3' similar to contains MIR_b2 MIR MIR repetitive element;
3236	15948	28328	1.25	4.0E-01	AF156778.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
3236	15948	28328	1.25	4.0E-01	AF156778.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
10810	23333	36346	3.98	4.0E-01	AL163264.2	NT	Homo sapiens chromosome 21 segment HS21C084
11882	24229	31001	3.09	4.0E-01	M77994.1	EST_HUMAN	EST01579 Hippocampus, Striatum (cat. #836205) Homo sapiens cDNA clone HHCAC80 similar to Retrovirus-related gag polyprotein
11882	24229	31047	3.08	4.0E-01	M77994.1	EST_HUMAN	EST01579 Hippocampus, Striatum (cat. #836205) Homo sapiens cDNA clone HHCAC80 similar to Retrovirus-related gag polyprotein
12181	24417	30947	1.38	4.0E-01	M77994.1	EST_HUMAN	EST01579 Hippocampus, Striatum (cat. #836205) Homo sapiens cDNA clone HHCAC80 similar to Retrovirus-related gag polyprotein
12181	24417	30948	1.38	4.0E-01	M77994.1	EST_HUMAN	EST01579 Hippocampus, Striatum (cat. #836205) Homo sapiens cDNA clone HHCAC80 similar to Retrovirus-related gag polyprotein
1680	14253	26787	4.64	3.0E-01	11430193	NT	Homo sapiens solute carrier family 4, anion exchanger, member 3 (SLC4A3), mRNA
1680	14253	26788	4.64	3.0E-01	11430193	NT	Homo sapiens solute carrier family 4, anion exchanger, member 3 (SLC4A3), mRNA
3383	15982	28470	1.4	3.0E-01	AL163263.2	NT	Homo sapiens chromosome 21 segment HS21C083
3509	16114	28502	3.17	3.0E-01	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
3509	16114	28503	3.17	3.0E-01	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
3656	16454	28918	1.2	3.0E-01	AF084530.1	NT	Homo sapiens cyclin-D binding Myb-like protein mRNA, complete cds
4683	17275	29722	4.36	3.0E-01	M30838.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
5116	17887	30124	1.19	3.0E-01	AL163265.2	NT	Homo sapiens chromosome 21 segment HS21C085
5115	17887	30125	1.19	3.0E-01	AL163265.2	NT	Homo sapiens chromosome 21 segment HS21C085
5985	18487	31211	1.5	3.0E-01	11434684	NT	Homo sapiens epididymal secretory protein (19.5KD) (HE1), mRNA
6446	19048		2.85	3.0E-01	4502740	NT	Homo sapiens cyclin-dependent kinase 6 (CDK6) mRNA
6897	19293	32097	4.48	3.0E-01	11497611	NT	Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 2, mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6697	19293	32088	4.48	3.0E-01	11497811	NT	Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 2, mRNA
7634	20146	33028	4.04	3.0E-01	U86959.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exons 10 and 11
7634	20146	33029	4.04	3.0E-01	U86959.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exons 10 and 11
7887	20429	33338	0.46	3.0E-01	6601599	NT	Homo sapiens ankyrin-like with transmembrane domains 1 (ANKTM1), mRNA
8708	21245	34168	2.8	3.0E-01	D16494.1	NT	Human mRNA for very low density lipoprotein receptor, complete cds
9212	21729	34672	0.8	3.0E-01	AB011168.1	NT	Homo sapiens mRNA for KIAA0504 protein, partial cds
12504	18025	30408	9.31	3.0E-01	AF189555.1	NT	Homo sapiens beta-ureidopropionase (BUP1) gene, exon 8
12504	18025	30407	9.31	3.0E-01	AF189555.1	NT	Homo sapiens beta-ureidopropionase (BUP1) gene, exon 8
52	12732	25189	2.37	1.0E-01	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
1288	13883	28408	0.6	1.0E-01	AW449746.1	EST_HUMAN	UHTB3-aka-d-01-O-U.1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2735280 3'
5608	18237	30687	0.84	1.0E-01	11434402	NT	Homo sapiens hypothetical protein PRO1855 (PRO1855), mRNA
6830	18589	32419	1.76	1.0E-01	BF348182.1	EST_HUMAN	602022088F1 NCI_CGAP_Brn87 Homo sapiens cDNA clone IMAGE:4157804 5'
6830	18589	32420	1.76	1.0E-01	BF348182.1	EST_HUMAN	602022088F1 NCI_CGAP_Brn87 Homo sapiens cDNA clone IMAGE:4157804 5'
1284	13880	26402	9.55	9.0E-02	AJ001688.1	NT	Homo sapiens NKX2D gene, exon 10
1284	13880	26403	9.65	9.0E-02	AJ001688.1	NT	Homo sapiens NKX2D gene, exon 10
5389	17947	30359	0.59	9.0E-02	AB020840.1	NT	Homo sapiens mRNA for KIAA0833 protein, partial cds
5654	18281	30760	4.15	9.0E-02	J03007.1	NT	Human Ncr_K+ ATPase alpha-subunit mRNA, partial cds
5780	18415	31131	2.53	9.0E-02	11427149	NT	Homo sapiens hypothetical protein FLJ20280 (FLJ20280), mRNA
6581	18178	31979	4	9.0E-02	AF310105.1	NT	Homo sapiens NALP1 mRNA, complete cds
7788	20341	33249	0.75	9.0E-02	AJ250568.1	NT	Homo sapiens partial TMAS2 gene for tetraspanin protein, exon 5
7788	20341	33250	0.76	9.0E-02	AJ250568.1	NT	Homo sapiens partial TMAS2 gene for tetraspanin protein, exon 5
8315	20858	33781	1.11	9.0E-02	AB040945.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
8315	20858	33782	1.11	9.0E-02	AB040945.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
9188	21715	34659	1.84	9.0E-02	11422088	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
98	12772	25254	11	8.0E-02	W28367.1	EST_HUMAN	2878 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
307	12862	25451	6.03	8.0E-02	BE368363.1	EST_HUMAN	601273513F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3614887 5'
1860	14448	27005	1.03	8.0E-02	11434722	NT	Homo sapiens diacylglycerol kinase, gamma (90kD) (DGKG), mRNA
1860	14448	27006	1.03	8.0E-02	11434722	NT	Homo sapiens diacylglycerol kinase, gamma (90kD) (DGKG), mRNA
4306	18892	28335	0.98	8.0E-02	AA809157.1	EST_HUMAN	cm13e02.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1540922 3' similar to contains L1.12 L1 repetitive element
5265	17827	30251	2.02	8.0E-02	AW157571.1	EST_HUMAN	au83108.X1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782911 3' similar to TR:O60302 O60302 KIAA0555 PROTEIN : contains element MER22 repetitive element ;
5581	18222	30871	0.76	8.0E-02	AB046820.1	NT	Homo sapiens mRNA for KIAA1600 protein, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5690	18316	30815	0.98	8.0E-02	AF284717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete cds
6686	19282	32068	1.25	8.0E-02	AJ000979.1	NT	Homo sapiens MCP-4 gene
6688	19285	32069	0.72	8.0E-02	AF179428.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit variant 1 (REV3L) mRNA, complete cds
7747	20255	33149	5.08	8.0E-02	X69536.1	NT	H. sapiens gene for inter-alpha-trypsin inhibitor heavy chain H1, exons 7-8
7747	20255	33150	5.08	8.0E-02	X69538.1	NT	H. sapiens gene for inter-alpha-trypsin inhibitor heavy chain H1, exons 7-8
8035	20577		0.68	8.0E-02	11416981	NT	Homo sapiens AIM-1 protein (LOC51151), mRNA
8364	20904	33822	4.86	8.0E-02	L04193.1	NT	Human lens membrane protein (mp19) gene, exon 11
8364	20904	33823	4.86	8.0E-02	L04193.1	NT	Human lens membrane protein (mp19) gene, exon 11
8461	21001	33918	0.67	8.0E-02	11428568	NT	Homo sapiens transcription termination factor, RNA polymerase II (TTF2), mRNA
8892	21530	34459	2.47	8.0E-02	AB014511.1	NT	Homo sapiens mRNA for KIAA0811 protein, partial cds
9639	22434	35410	1.76	8.0E-02	Y13829.1	NT	Homo sapiens mRNA for MBNL protein
10883	23214	36226	5.17	8.0E-02	AF074393.1	NT	Homo sapiens nuclear mitogen- and stress-activated protein kinase-1 (MSK1) mRNA, complete cds
11239	23770	36828	2.58	8.0E-02	4503340	NT	Homo sapiens dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex) (DLST) mRNA
257	15411	25402	1.61	7.0E-02	AB018301.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
257	15411	25403	1.61	7.0E-02	AB018301.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
617	13244	26439	1.09	7.0E-02	AF007822.1	NT	Homo sapiens cytoplasmic Sepsis truncated isoform mRNA, complete cds
1323	13917	26439	3.02	7.0E-02	4502394	NT	Homo sapiens B-cell CLL/lymphoma 7b (BCL7B) mRNA
2228	14804	27375	1.25	7.0E-02	5031570	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2228	14804	27376	1.25	7.0E-02	5031570	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2569	15161	27728	1.45	7.0E-02	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S52 precursor, mRNA, complete cds
2751	15306	27870	2.14	7.0E-02	6005738	NT	Homo sapiens NFAS-related gene (DIS155E), mRNA
2781	15334	27904	1.03	7.0E-02	AB031007.1	NT	Homo sapiens DNA, MHC class I region, 7.1 ancestral haplotype
3369	18003	28474	0.65	7.0E-02	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
3369	18003	28475	0.65	7.0E-02	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
4687	17269	28718	1.08	7.0E-02	S71824.1	NT	N-CAM=145 kDa neural cell adhesion molecule [human, small cell lung cancer cell line OS2-R, mRNA, 2980 nt]
4687	17269	28719	1.08	7.0E-02	S71824.1	NT	N-CAM=145 kDa neural cell adhesion molecule [human, small cell lung cancer cell line OS2-R, mRNA, 2980 nt]
5147	17717	30148	1.16	7.0E-02	AL183281.2	NT	Homo sapiens chromosome 21 segment HS21C081
5350	17910	30325	1.12	7.0E-02	4506118	NT	Homo sapiens propro-osteocalcin-related homeobox 1 (PROX1) mRNA
5468	18101	30419	4.93	7.0E-02	AA446206.1	EST_HUMAN	z686412.1 Soares_beslis_NHT Homo sapiens cDNA clone IMAGE:781175 5

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1631	14223		1.18	5.0E-02	BE380882.1	EST_HUMAN	601263012F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605018 5'
2793	15348	27915	2.12	3.0E-02	BE009714.1	EST_HUMAN	601501242F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902839 5'
6036	18655	31397	7.84	3.0E-02	AA378336.1	EST_HUMAN	EST191020 Synovial sarcoma Homo sapiens cDNA 5' end similar to ribosomal protein S13
10645	23177	36189	2.86	3.0E-02	X15804.1	NT	Human mRNA for alpha-actinin
10645	23177	36189	2.86	3.0E-02	X15804.1	NT	Human mRNA for alpha-actinin
12358	25103		1.76	3.0E-02	BF367138.1	EST_HUMAN	RC1-GN0021-240800-012-e11 GN0021 Homo sapiens cDNA
28	12707	25164	1.57	2.0E-02	4501868	NT	Homo sapiens activin A receptor, type IIB (ACVR2B) mRNA
153	12816	25304	28.78	2.0E-02	AF154830.1	NT	Homo sapiens carbamyl phosphate synthetase I mRNA, complete cds
191	12851	25334	3.47	2.0E-02	11422946	NT	Homo sapiens hypothetical protein dJ462023.2 (DJ462023.2), mRNA
191	12851	25335	3.47	2.0E-02	11422946	NT	Homo sapiens hypothetical protein dJ462023.2 (DJ462023.2), mRNA
779	13398	25900	12.47	2.0E-02	BE289190.1	EST_HUMAN	601118337F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028304 5'
779	13398	25901	12.47	2.0E-02	BE289190.1	EST_HUMAN	601118337F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028304 5'
1752	14942		1.42	2.0E-02	S78653.1	NT	mg-mae-related [human, Genomic, 2416 nt]
1880	14563	27122	4.27	2.0E-02	A1818119.1	EST_HUMAN	wk27407.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2413549 3' similar to TR-Q12844
1880	14563	27122	4.27	2.0E-02	A1818119.1	EST_HUMAN	Q12844 BREAKPOINT CLUSTER REGION PROTEIN ;
1980	14563	27123	4.27	2.0E-02	A1818119.1	EST_HUMAN	wk27407.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2413549 3' similar to TR-Q12844
2092	14872	27242	4.82	2.0E-02	4506880	NT	Q12844 BREAKPOINT CLUSTER REGION PROTEIN ;
2683	16241	27809	21.03	2.0E-02	6812457	NT	Homo sapiens syndecan 4 (amphiglycan, ryudocan) (SDC4) mRNA
2857	14287	26823	1.16	2.0E-02	11418424	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
2857	14287	26824	1.16	2.0E-02	11418424	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
3673	16274	28740	1.13	2.0E-02	AF231919.1	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
3673	16274	28741	1.13	2.0E-02	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3749	16350	28818	8.13	2.0E-02	5803180	NT	Homo sapiens chromosome 21 unknown mRNA
4378	16983	29409	1.48	2.0E-02	M10978.1	NT	Homo sapiens stress-induced-phosphoprotein 1 (Hsp70/Hsp90-organizing protein) (STIP1), mRNA
4968	17444	29895	0.75	2.0E-02	AF136523.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
5133	17705		4.94	2.0E-02	AL040437.1	EST_HUMAN	Homo sapiens bile salt export pump (BSEP) mRNA, complete cds
6444	19046		0.68	2.0E-02	4504756	NT	DKFZp434C0414_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434C0414 5'
6727	19321	32126	2.75	2.0E-02	AB028891.1	NT	Homo sapiens integrin, alpha L (antigen CD11A (p180), lymphocyte function-associated antigen 1; alpha polypeptide) (ITGAL) mRNA
7489	20005		0.75	2.0E-02	U67780.1	NT	Homo sapiens mRNA for KIAA1068 protein, partial cds
8789	21328	34253	1.78	2.0E-02	AW340174.1	EST_HUMAN	Human NPY Y1-like receptor pseudogene mRNA, complete cds
8789	21328	34253	1.78	2.0E-02	AW340174.1	EST_HUMAN	h002h02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2908371 3' similar to TR-O02711
8789	21328	34253	1.78	2.0E-02	AW340174.1	EST_HUMAN	O02711 PRO-POL-DUTPASE POLYPROTEIN ;

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10639	23171	36182	6.96	2.0E-62	11434900	NT	Homo sapiens thyroid stimulating hormone receptor (TSHR), mRNA
10828	23444	38485	1.92	2.0E-62	5803103	NT	Homo sapiens male-specific lethal-3 (Drosophila)-like 1 (MSL3L1), mRNA
11022	23538	36571	1.84	2.0E-62	AW836290.1	EST_HUMAN	CM4-LT0028-161289-082-g08 L T0028 Homo sapiens cDNA
11022	23538	36572	1.84	2.0E-62	AW836290.1	EST_HUMAN	CM4-LT0028-161289-082-g08 L T0028 Homo sapiens cDNA
12248	24458	30880	2.99	2.0E-62	AB028016.1	NT	Homo sapiens mRNA for KIAA1083 protein, partial cds
12533	16241	27809	98.37	2.0E-62	6912457	NT	Homo sapiens calcitonin binding protein 1 (KIAA0330), mRNA
1880	14475	27034	1.6	1.0E-62	R78078.1	EST_HUMAN	y80e08.r1 Soares placenta Nb2f-IP Homo sapiens cDNA clone IMAGE:145574 5'
1890	14475	27035	1.6	1.0E-62	R78078.1	EST_HUMAN	y80e08.r1 Soares placenta Nb2f-IP Homo sapiens cDNA clone IMAGE:145574 5'
2118	14896	27285	10.49	1.0E-62	4508888	NT	Homo sapiens ribosomal protein, large, P1 (RPLP1) mRNA
8189	20730	33842	1.01	1.0E-62	BE439825.1	EST_HUMAN	HTM1-288F HTM1 Homo sapiens cDNA
							1q01b02.x1 NCI CGAP CLL1 Homo sapiens cDNA clone IMAGE:2107467 3' similar to SW:PTNF_HUMAN
9091	21627	34563	4.16	1.0E-62	AI380358.1	EST_HUMAN	Q16825 PROTEIN-TYROSINE PHOSPHATASE D1 ; contains Alu repetitive element; contains element
							MER17 repetitive element ;
9091	21627	34564	4.16	1.0E-62	AI380358.1	EST_HUMAN	1q01b02.x1 NCI CGAP CLL1 Homo sapiens cDNA clone IMAGE:2107467 3' similar to SW:PTNF_HUMAN
2078	14856	27228	3.52	9.0E-63	AU121681.1	EST_HUMAN	Q16825 PROTEIN-TYROSINE PHOSPHATASE D1 ; contains Alu repetitive element; contains element
							MER17 repetitive element ;
2088	14887		10.78	9.0E-63	AA316723.1	EST_HUMAN	AU121681 MAMMA1 Homo sapiens cDNA clone MAMMA1000738 5'
							EST188414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L28
2673	15231		1.18	9.0E-63	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
3674	16275	28742	1.02	9.0E-63	BE388571.1	EST_HUMAN	601281867F1 NH_MGC_44 Homo sapiens cDNA clone IMAGE:3903832 5'
11501	23950		18.44	9.0E-63	11418528	NT	Homo sapiens ribosomal protein L10a (RPL10A), mRNA
6705	19300	32104	4.23	8.0E-63	BF036364.1	EST_HUMAN	601460521F1 NH_MGC_68 Homo sapiens cDNA clone IMAGE:3863808 5'
287	12924	25410	8.58	7.0E-63	AF231918.1	NT	Homo sapiens chromosome 21 unknown mRNA
3111	15728	28197	0.59	6.0E-63	11528178	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
6782	18373	32189	1.17	6.0E-63	AB033063.1	NT	Homo sapiens mRNA for KIAA1287 protein, partial cds
6898	19494	32315	1.37	6.0E-63	AF085771.1	NT	Homo sapiens PTH-responsive osteosarcoma B1 protein (B1) mRNA, complete cds
1423	14016	26545	1.82	5.0E-63	AB014511.1	NT	Homo sapiens mRNA for KIAA0061 protein, partial cds
1453	14045	26574	6.35	5.0E-63	AI674184.1	EST_HUMAN	wc08cd08.x1 NCI CGAP P128 Homo sapiens cDNA clone IMAGE:2314670 3'
1453	14045	26575	6.35	5.0E-63	AI674184.1	EST_HUMAN	wc08cd08.x1 NCI CGAP P128 Homo sapiens cDNA clone IMAGE:2314670 3'
1523	14116		0.97	5.0E-63	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
1862	15452	27008	0.9	5.0E-63	AJ287710.1	NT	Homo sapiens mRNA for CDC2L5 protein kinase, (CDC2L5 gene), isoform 2
3270	15882	28364	2.6	5.0E-63	X04201.1	NT	Human skeletal muscle 1.3 kb mRNA for tropomyosin

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5867	18598	31323	0.93	5.0E-03	M22878.1	NT	Human somatic cytochrome c (HC1) processed pseudogene, complete cds
6257	18868		1.49	5.0E-03	AF045555.1	NT	Homo sapiens wbscr1 (WBSOCR1) and wbscr5 (WBSOCR5) genes, complete cds, alternatively spliced and replication factor C subunit 2 (RFC2) gene, complete cds
7700	20209	33098	3.68	5.0E-03	AF067136.1	NT	Homo sapiens protein phosphatase-1 regulatory subunit 7 (PPP1R7) gene, exon 11, complete cds and alternatively spliced product
8541	21080	34000	0.68	5.0E-03	4557528	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
8541	21080	34001	0.68	5.0E-03	4557528	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
8541	22041	35002	2.28	5.0E-03	AF274983.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
9721	22219	35194	2.87	5.0E-03	5032156	NT	Homo sapiens TAR (HIV) RNA-binding protein 1 (TARBP1) mRNA
8962	22477	35459	1.58	5.0E-03	AF068313.2	NT	Homo sapiens WSB1 protein (WSB1) mRNA, complete cds
10705	23234	36247	2.14	5.0E-03	11439599	NT	Homo sapiens nucleobindin 2 (NUCB2), mRNA
12145	24731	30856	2.11	5.0E-03	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), mRNA
91	12767		6.55	4.0E-03	AA458933.1	EST_HUMAN	z65009.s1 Soares, testes_NHT Homo sapiens cDNA clone IMAGE:766668 3' similar to SW:GLPA_RAT
470	13103	25595	1.56	4.0E-03	4557878	NT	P37397 CALPONIN, ACIDIC ISOFORM ;
470	13103	25598	1.56	4.0E-03	4557878	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
804	13421	25928	2.39	4.0E-03	7657454	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
804	13421	25927	2.39	4.0E-03	7657454	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
1225	13824	26339	1.5	4.0E-03	8923658	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
2020	14602	27167	5.25	4.0E-03	AF047677.1	NT	Homo sapiens hypothetical protein FLJ20731 (FLJ20731), mRNA
2638	15197	27771	1.41	4.0E-03	7656972	NT	Homo sapiens dystrophin (DMD) gene, deletion breakpoints 1-3 in intron 5
3624	16227	28705	0.8	4.0E-03	7705398	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
4122	16715	28171	2.14	4.0E-03	4504854	NT	Homo sapiens tumor antigen SLP-8p (HCC8), mRNA
5171	16227	28705	0.88	4.0E-03	7705398	NT	Homo sapiens interleukin 18 receptor 1 (IL18R1) mRNA
							Homo sapiens tumor antigen SLP-8p (HCC8), mRNA
5825	18449	31172	5.27	4.0E-03	T46864.1	EST_HUMAN	y694c12.r1 Strabagene liver (4637224) Homo sapiens cDNA clone IMAGE:78838 5' similar to similar to SP:A44391 A44391 SERUM RESPONSE ELEMENT-BINDING PROTEIN SRE-ZBP - HUMAN ,
11013	23527	36563	14.54	4.0E-03	AV682051.1	EST_HUMAN	AV682051 GKC Homo sapiens cDNA clone GKCDRF07 5'
3713	16314	28781	8.68	3.0E-03	BF680630.1	EST_HUMAN	602246554F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4332038 5'
3713	16314	28782	8.68	3.0E-03	BF680630.1	EST_HUMAN	602246554F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4332038 5'
4319	16905		5.51	3.0E-03	AF225898.1	NT	Homo sapiens tensin mRNA, complete cds
6678	19275	32078	1.28	3.0E-03	11428182	NT	Homo sapiens GCN5 (general control of amino-acid synthesis, yeast, homolog)-like 2 (GCN5L2), mRNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10680	23212	36223	4.85	3.0E-03	AB24828.1	EST_HUMAN	w62d05.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2304468 3'
204	12865	25349	26.58	2.0E-03	AB015610.1	NT	Chlorococcus aesthiops mRNA for ribosomal protein S4X, complete cds
204	12865	25350	26.58	2.0E-03	AB015610.1	NT	Chlorococcus aesthiops mRNA for ribosomal protein S4X, complete cds
345	12897	25483	10.28	2.0E-03	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
348	12897	25483	6.69	2.0E-03	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
1657	14260	26784	7.56	2.0E-03	AF225898.1	NT	Homo sapiens lensin mRNA, complete cds
2527	15091	27684	1.01	2.0E-03	BE252882.1	EST_HUMAN	601177686F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3358220 5'
5611	18240	30689	6.13	2.0E-03	AW984385.1	EST_HUMAN	EST378458 MAGE resequences, MACH1 Homo sapiens cDNA
5818	18442	31184	1.06	2.0E-03	11430038	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
5832	18456	31177	0.78	2.0E-03	U74313.1	EST_HUMAN	HSU74313 Human chromosome 14 Homo sapiens cDNA clone 1-88
6785	19378		1.21	2.0E-03	AW502002.1	EST_HUMAN	UHF-BNO-als-g-09-0-JLr1 NIH_MGC_60 Homo sapiens cDNA clone IMAGE:3078329 5'
12032	24322		2.49	2.0E-03	AA126735.1	EST_HUMAN	z28c10.s1 Soares_pregnant_uterus_NIHPU Homo sapiens cDNA clone IMAGE:503346 3'
12119	24378		2.81	2.0E-03	L41826.1	NT	Homo sapiens CYP17 gene, 5' end
12404	24562		5.68	2.0E-03	BF035327.1	EST_HUMAN	60146553IF1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3862088 5'
107	12783	25285	33.31	1.0E-03	AF238897.1	NT	Homo sapiens GTR1 pseudogene
107	12783	25288	33.31	1.0E-03	AF238897.1	NT	Homo sapiens GTR1 pseudogene
544	13175	25655	7.63	1.0E-03	7657016	NT	Homo sapiens hypothetical protein (DJ328E19.C1.1), mRNA
628	13263	25727	3.51	1.0E-03	AI146755.1	EST_HUMAN	0y64b08.x1 NCI_CGAP_QLL1 Homo sapiens cDNA clone IMAGE:1672503 3' similar to TR:Q62384 Q62384
905	13519	26037	5.19	1.0E-03	D87675.1	NT	ZINC FINGER PROTEIN. ;
1280	13875	26305	6.4	1.0E-03	8923270	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
1280	13875	26398	6.4	1.0E-03	8923270	NT	Homo sapiens hypothetical protein FLJ20291 (FLJ20291), mRNA
1389	13883	26509	1.09	1.0E-03	AB046783.1	NT	Homo sapiens hypothetical protein FLJ20291 (FLJ20291), mRNA
2375	14945	27518	1.57	1.0E-03	AF231981.1	NT	Homo sapiens long chain polyunsaturated fatty acid elongation enzyme (HELO1) mRNA, complete cds
2503	15067	27641	2.67	1.0E-03	AF056088.1	NT	Homo sapiens MHC class 1 region
2849	13933	28453	1.93	1.0E-03	BE287368.1	EST_HUMAN	601177686F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532865 5'
2849	13933	28454	1.93	1.0E-03	BE287368.1	EST_HUMAN	601177686F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532865 5'
2860	15578	28055	1.99	1.0E-03	D87676.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
3252	15884		1.51	1.0E-03	AF231981.1	NT	Homo sapiens long chain polyunsaturated fatty acid elongation enzyme (HELO1) mRNA, complete cds
4520	17104	28650	1.82	1.0E-03	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5755	18381	31082	1.36	1.0E-03	U78509.1	NT	Homo sapiens glucocorticoid receptor (GRL) gene, intron D, exon 5, and intron E
5755	18381	31083	1.36	1.0E-03	U78509.1	NT	Homo sapiens glucocorticoid receptor (GRL) gene, intron D, exon 5, and intron E

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5638	18559	31288	0.89	1.0E-03	AF227138.1	NT	Homo sapiens candidate taste receptor T2R14 gene, complete cds
6074	18691	31437	9.28	1.0E-03	4557782	NT	Homo sapiens neurofibronin 1 (neurofibromatosis, von Recklinghausen disease, Watson disease) (NF1) mRNA
6344	18950	31728	1.02	1.0E-03	7682241	NT	Homo sapiens KIAA0672 gene product (KIAA0672), mRNA
6888	18821	32455	2.18	1.0E-03	11431590	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
7287	18825	32684	5.8	1.0E-03	D42072.1	NT	Human mRNA for NF1 N-isoform-exon11, complete cds
8203	20744	33857	2.4	1.0E-03	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
8480	21019	33834	1.1	1.0E-03	Y10183.1	NT	H. sapiens mRNA for MEMD protein
8593	21122	34042	1.26	1.0E-03	AF182032.1	NT	Homo sapiens protein kinase inhibitor gamma (PKIG) mRNA, complete cds
9373	20312	33214	1.84	1.0E-03	AB040918.1	NT	Homo sapiens mRNA for KIAA1485 protein, partial cds
9377	20318	33218	1.26	1.0E-03	AF091395.1	NT	Homo sapiens Trio isoform mRNA, complete cds
9507	22007	34963	4.34	1.0E-03	X13474.1	NT	Human PreA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 9)
9507	22007	34964	4.34	1.0E-03	X13474.1	NT	Human PreA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 9)
9841	22141	35108	0.59	1.0E-03	AL049801.1	NT	Novel human gene mapping to chromosome 13, similar to rat RhoGAP
10050	22545	35540	0.51	1.0E-03	11433648	NT	Homo sapiens tyrosine receptor 3 (RYR3), mRNA
11686	24822	30783	1.37	1.0E-03	AL268282.1	EST_HUMAN	qin03c12.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1880758 3' similar to WP:11984.4 CE13742;
12301	24498		2.08	1.0E-03	AJ230125.1	NT	Homo sapiens GGT1 gene, exon 1
12397	24557		5.43	1.0E-03	11417858	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA
12568	24687	30874	1.72	1.0E-03	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12584	25080		2.21	1.0E-03	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
10484	22878		1.17	8.0E-04	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
4034	18832	28101	2.19	6.0E-04	AF142482.1	NT	Homo sapiens transcription enhancer factor-5 mRNA, complete cds
12524	24640		1.31	6.0E-04	11418351	NT	Homo sapiens mitogen-activated protein kinase 12 (MAPK12), mRNA
5570	18201	30850	3.71	5.0E-04	AB014512.1	NT	Homo sapiens mRNA for KIAA0612 protein, partial cds
5570	18201	30851	3.71	5.0E-04	AB014512.1	NT	Homo sapiens mRNA for KIAA0612 protein, partial cds
6189	18808	31578	6.6	5.0E-04	AA722434.1	EST_HUMAN	zg87g06.s1 Soares_fetal_heart_NbH19W Homo sapiens cDNA clone IMAGE:408504.3'
7081	19653	32491	1.45	5.0E-04	AI015800.1	EST_HUMAN	cd83d05.s1 Soares_fetal_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1623369.3'
8573	21112	34031	0.78	5.0E-04	BF529116.1	EST_HUMAN	602042163F1 NCI_CGAP_Brm67 Homo sapiens cDNA clone IMAGE:4180073.5'
10852	23373	36391	1.97	5.0E-04	11423982	NT	Homo sapiens adenylate kinase 2 (AK2), mRNA
10852	23373	36382	1.97	5.0E-04	11423982	NT	Homo sapiens adenylate kinase 2 (AK2), mRNA
12010	25083	30517	4.36	5.0E-04	T89398.1	EST_HUMAN	yd88b04.s1 Soares_fetal_liver_spleen_1NfLS Homo sapiens cDNA clone IMAGE:1162239.3'
1882	14468		9.28	4.0E-04	LO5094.1	NT	Homo sapiens ribosomal protein L27 mRNA, complete cds

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4827	17405	29859	3.19	4.0E-04	A1591312.1	EST_HUMAN	hw11f10.x1 NCL_CGAP_Bm62 Homo sapiens cDNA clone IMAGE:2259403 3' similar to TR:Q16285 Q16285 PROTEIN TYROSINE PHOSPHATASE;
6594	19191	31695	2.35	4.0E-04	11440670	NT	Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like (SLC22A1L), mRNA
6594	19191	31696	2.35	4.0E-04	11440670	NT	Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like (SLC22A1L), mRNA
6902	19490		0.89	4.0E-04	L27398.1	NT	Homo sapiens huntingtin (HD) gene, exon 37
11328	23026	36035	1.8	4.0E-04	11545792	NT	Homo sapiens hypothetical protein FLJ12455 (FLJ12455), mRNA
11598	24041	37110	4	4.0E-04	4507822	NT	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
639	13262	25738	3.74	3.0E-04	AB022785.1	NT	Homo sapiens ASH2L gene, complete cds, similar to Drosophila ash2 gene
750	13370	25884	9.91	3.0E-04	4502508	NT	Homo sapiens complement component 5 (C5) mRNA
1776	14366	26910	1.19	3.0E-04	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S52 precursor, mRNA, complete cds
1776	14366	26911	1.19	3.0E-04	AF167706.1	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
1809	14368	26944	5.11	3.0E-04	4557556	NT	Homo sapiens zinc finger protein 277 (ZNF277), mRNA
5881	18483	31207	4.01	3.0E-04	11498268	NT	Homo sapiens mRNA for MEGF2, partial cds
6290	18907	31678	1.07	3.0E-04	AB011536.1	NT	Homo sapiens chromosome 21 open reading frame 18 (C21ORF18), mRNA
6579	19177	31977	5.19	3.0E-04	11526228	NT	Homo sapiens protocadherin alpha 13 (PCDH-alpha13) mRNA, complete cds
8140	20681	33363	0.89	3.0E-04	AF152309.1	NT	Homo sapiens mRNA for KIAA0679 protein, partial cds
8523	21082	33984	3.81	3.0E-04	AB014579.1	NT	Homo sapiens glycogenin-1L mRNA, complete cds
9511	22011	34970	7.24	3.0E-04	AF087942.1	NT	Homo sapiens axonal transport of synaptic vesicles (ATSV) mRNA
10979	23493	36523	1.64	3.0E-04	4757821	NT	Human cbl-b truncated form 1 lacking leucine zipper mRNA, complete cds
11527	23975	37045	1.62	3.0E-04	U26711.1	NT	w30h11.x1 NCL_CGAP_Corf6 Homo sapiens cDNA clone IMAGE:2391813 3'
9887	22166	35140	0.51	2.0E-04	AB103993.1	EST_HUMAN	w30h11.x1 NCL_CGAP_Corf6 Homo sapiens cDNA clone IMAGE:2391813 3'
9887	22168	35141	0.51	2.0E-04	AB103993.1	EST_HUMAN	601175782F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
160	12823	25311	2.34	1.0E-04	BE285714.1	EST_HUMAN	601111698F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352559 5'
3125	15739	28207	1.98	1.0E-04	BE253433.1	EST_HUMAN	601111698F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352559 5'
3125	15739	28208	1.98	1.0E-04	BE253433.1	EST_HUMAN	Homo sapiens hypothetical protein (FLJ20748), mRNA
4450	17036	29480	1.14	1.0E-04	9500992	NT	Escherichia coli K-12 MG1655 section 159 of 400 of the complete genome
6223	18832	31806	1.21	1.0E-04	AE000269.1	NT	DKFZp434G0314.1 434 (synonym: hnc3) Homo sapiens cDNA clone DKFZp434G0314 5'
6412	19015	31797	1.32	1.0E-04	AL040518.1	EST_HUMAN	y8702.1 Scores Infant brain 1N1B Homo sapiens cDNA clone IMAGE:45053 5'
6421	19024	31808	0.79	1.0E-04	H08270.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C004
8057	20599	33507	0.56	1.0E-04	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
8057	20599	33508	0.56	1.0E-04	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
8180	21757	34703	2.28	1.0E-04	11426710	NT	Homo sapiens paired box gene 5 (B-cell lineage specific activator protein) (PAX5), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9702	22201	35173	1.8	1.0E-04	BE780478.1	EST_HUMAN	601468748F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3872099 5'
10845	23461	36483	3.48	1.0E-04	U65580.1	NT	Homo sapiens IL-1 receptor antagonist IL-1Ra (IL-1RN) gene, alternatively spliced forms, complete cds
11197	23702	36753	2.05	1.0E-04	AI272244.1	EST_HUMAN	ap22602.x1 Schiller oligodendroglioma Homo sapiens cDNA clone IMAGE:1666122 3' similar to TRQ82845
11592	24035	37104	2.28	1.0E-04	11418871	NT	Q62845 NEURAL CELL ADHESION PROTEIN BIG-2 PRECURSOR ;
12133	12823	25311	1.34	1.0E-04	BE285714.1	EST_HUMAN	Homo sapiens KIAA0184 gene product (KIAA0184), mRNA
1525	14117	28854	2.12	8.0E-05	AF027302.1	NT	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
3191	15803	28275	1.15	8.0E-05	7662027	NT	Homo sapiens TNF-alpha stimulated ABC protein (ABC50) mRNA, complete cds
3191	15803	28276	1.15	8.0E-05	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
5601	18230	30879	1.59	8.0E-05	X82568.1	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
5601	18230	30880	1.59	8.0E-05	X82569.1	NT	M.musculus glyT1 gene (exons 1c and 2)
8194	20735	33845	1.89	8.0E-05	AF274753.1	NT	M.musculus glyT1 gene (exons 1c and 2)
155	12818	26306	10.08	8.0E-05	AF164830.1	NT	Homo sapiens progressive arylsulfatase-like protein (ANK) mRNA, complete cds
4834	17217	28688	1.92	8.0E-05	AI700898.1	EST_HUMAN	Homo sapiens carbamyl phosphate synthetase I mRNA, complete cds
4834	17217	28670	1.92	8.0E-05	AI700898.1	EST_HUMAN	we09e04.x1 NCI CGAP_L124 Homo sapiens cDNA clone IMAGE:2340808 3' similar to gb:K00558
7028	19562	32389	0.7	8.0E-05	11418378	NT	TUBULIN ALPHA-1 CHAIN (HUMAN);
7280	19818	32877	1.44	8.0E-05	11428529	NT	Homo sapiens KIAA0183 gene product (KIAA0183), mRNA
7280	19818	32878	1.44	8.0E-05	11428529	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11), mRNA
8138	20678	33590	1.93	8.0E-05	AF032897.1	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11), mRNA
8287	21887	34832	1.88	8.0E-05	11420944	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
8287	21887	34833	1.88	8.0E-05	11420944	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
9782	22260	35243	3.42	8.0E-05	5174944	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
9793	22281		3.07	8.0E-05	AB037816.1	NT	Homo sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA
10134	22828	35617	0.75	8.0E-05	9845523	NT	Homo sapiens mRNA for KIAA1395 protein, partial cds
10582	23127	36141	1.76	8.0E-05	AF112152.1	NT	Homo sapiens early growth response 2 (Krox-20 (Drosophila) homolog) (EGR2), mRNA
11357	23811	36871	2.34	8.0E-05	10884024	NT	Homo sapiens HCF-binding transcription factor Zhangfei (ZF), mRNA
12365	24538		25.75	8.0E-05	AA828058.1	EST_HUMAN	Homo sapiens HCF-binding transcription factor Zhangfei (ZF), mRNA
287	12853	25441	8.43	7.0E-05	D87875.1	NT	z84401.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:744649 3' similar to contains L1.L1 L1
287	12853	25442	8.43	7.0E-05	D87875.1	NT	repetitive element ;
4458	17042	29488	5.84	7.0E-05	M65708.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
							Homo sapiens DNA for amyloid precursor protein, complete cds
							Homo sapiens DNA for amyloid precursor protein, complete cds
							Homo sapiens Ly-6-like protein (CD58) mRNA, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4505	17089		1.35	7.0E-05	AL183246.2	NT	Homo sapiens chromosome 21 segment HS21C048
8144	21678	34623	0.82	4.0E-05	BE439825.1	EST_HUMAN	HTM1-288F HTM1 Homo sapiens cDNA
11548	23986	37068	1.89	4.0E-05	AW950834.1	EST_HUMAN	EST362704 MAGe resequences, MAGA Homo sapiens cDNA
11548	23986	37068	1.89	4.0E-05	AW950834.1	EST_HUMAN	EST362704 MAGe resequences, MAGA Homo sapiens cDNA
224	12885	25370	8.53	3.0E-05	AV648381.1	EST_HUMAN	AV648381 GLC Homo sapiens cDNA clone GLC81F01.3
5634	18283	30735	1.75	3.0E-05	BF528041.1	EST_HUMAN	602071146F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4214147.5
5854	24750	31200	0.72	3.0E-05	4503354	NT	Homo sapiens dedicator of cytokinesis 1 (DOCK1) mRNA
7404	19828	32782	1.38	3.0E-05	AW958121.1	EST_HUMAN	EST370101 MAGe resequences, MAGe Homo sapiens cDNA
7404	19828	32783	1.38	3.0E-05	AW958121.1	EST_HUMAN	EST370101 MAGe resequences, MAGe Homo sapiens cDNA
8277	21803	34753	1.71	3.0E-05	7682289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
9277	21803	34754	1.71	3.0E-05	7682289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
8662	22161	35134	0.87	3.0E-05	BF213446.1	EST_HUMAN	601845212F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4070451.5
10759	23283	38288	2.2	3.0E-05	R83190.1	EST_HUMAN	yp87g11.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:194468.5
973	13585	28088	2.57	2.0E-05	4504374	NT	Homo sapiens H factor 1 (complement) (HF1) mRNA
1686	14278	28811	1.55	2.0E-05	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
1686	14278	28812	1.55	2.0E-05	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
1684	14568	27127	3.25	2.0E-05	4507512	NT	Homo sapiens tissue inhibitor of metalloproteinase 3 (Sorsby fundus dystrophy, pseudoinflammatory) (TIMP3) mRNA
1987	14568	27131	1.57	2.0E-05	BE383873.1	EST_HUMAN	601312161F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3658882.5
2470	15037	27604	1.23	2.0E-05	5453685	NT	Homo sapiens G protein-coupled receptor 19 (GPR19) mRNA
2470	15037	27605	1.23	2.0E-05	5453685	NT	Homo sapiens G protein-coupled receptor 19 (GPR19) mRNA
							Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2505	15069	27642	4.2	2.0E-05	AF240786.1	NT	Homo sapiens glycine cleavage system protein H (aminomethyl carrier) (GCSH) mRNA
2554	15118	27688	1.05	2.0E-05	4758423	NT	Homo sapiens H factor 1 (complement) (HF1) mRNA
2844	13584	28088	8.06	2.0E-05	4504374	NT	Homo sapiens Usurpin-gamma mRNA, complete cds
3183	15895	28278	2.54	2.0E-05	AF015452.1	NT	Homo sapiens unconventional myosin-15 (LOC51168), mRNA
3621	16224	28701	2.88	2.0E-05	7705900	NT	Homo sapiens unconventional myosin-15 (LOC51168), mRNA
3621	16224	28702	2.88	2.0E-05	7705900	NT	Homo sapiens unconventional myosin-15 (LOC51168), mRNA
3677	16278	28745	0.72	2.0E-05	AB037807.1	NT	Homo sapiens mRNA for KIAA1388 protein, partial cds
							qim01c02.x1 Soares_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:1880546.3 similar to WP:123G7.4 CE03705
3613	16413	28877	0.84	2.0E-05	AI280264.1	EST_HUMAN	Homo sapiens hypothetical protein (HS322B1A), mRNA
4452	17038	29481	1.42	2.0E-05	7657185	NT	Homo sapiens lipopolysaccharide-binding protein (LBP) mRNA, complete cds
5048	17821	30066	3.24	2.0E-05	AF105087.1	NT	Homo sapiens KIAA0187 gene product (KIAA0187) mRNA
5161	17758	30185	3.19	2.0E-05	7681970	NT	Homo sapiens KIAA0187 gene product (KIAA0187) mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5251	17814	30237	1.89	2.0E-06	AA447931.1	EST_HUMAN	z11d07.r1 Scores: total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:788157 5'
5251	17814	30238	1.89	2.0E-06	AA447931.1	EST_HUMAN	z11d07.r1 Scores: total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:788157 5'
5671	18288	30778	5.38	2.0E-06	7705784	NT	Homo sapiens CGI-48 protein (LOC51088), mRNA
5671	18288	30779	5.38	2.0E-06	7705784	NT	Homo sapiens CGI-48 protein (LOC51088), mRNA
5878	18498	31223	1.21	2.0E-06	11225608	NT	Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA
5878	18498	31224	1.21	2.0E-06	11225608	NT	Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA
6291	18899	31670	3.33	2.0E-06	M59724.1	NT	Human muscle-type phosphofructokinase (PFK-M) gene, exon 7
6577	19175	31974	1.08	2.0E-06	11427182	NT	Homo sapiens transcription factor 2, hepatic; LF-B3; variant hepatic nuclear factor (TCF2), mRNA
6577	19175	31975	1.08	2.0E-06	11427182	NT	Homo sapiens transcription factor 2, hepatic; LF-B3; variant hepatic nuclear factor (TCF2), mRNA
6885	19281	32084	2.42	2.0E-06	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 8 (DNAH8), complete cds
6881	19395	32428	1.8	2.0E-06	11435773	NT	Homo sapiens huntingtin (Huntington disease) (HD), mRNA
8088	21608	34537	1.85	2.0E-06	11427182	NT	Homo sapiens ribophorin II (RPN2), mRNA
10283	22178	35789	0.49	2.0E-06	11434330	NT	Homo sapiens KIAA1085 protein (KIAA1085), mRNA
10802	23138	36150	2.21	2.0E-06	4757853	NT	Homo sapiens bone morphogenetic protein receptor, type IA (BMPRI1A), mRNA
11548	23894	37085	1.74	2.0E-06	7682289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
11548	23894	37086	1.74	2.0E-06	7682289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
12103	24385	30871	2.55	2.0E-06	AF240788.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12220	24442		1.41	2.0E-06	11417880	NT	Homo sapiens hypothetical protein (HS322B1A), mRNA
12534	24848	30860	8.02	2.0E-06	11418184	NT	Homo sapiens adenylosuccinate lyase (ADSL), mRNA
5798	18424	31140	7.88	1.0E-06	AA284651.1	EST_HUMAN	z223h04.r1 Scores: ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:714007 5' similar to TR:G1067084 G1067084 F55H2.8 ;
5798	18424	31141	7.88	1.0E-06	AA284651.1	EST_HUMAN	z223h04.r1 Scores: ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:714007 5' similar to TR:G1067084 G1067084 F55H2.8 ;
7523	20043	32812	4.16	1.0E-06	BF370000.1	EST_HUMAN	RC8-FN0019-280600-011-G11 FN0019 Homo sapiens cDNA
7523	20043	32813	4.16	1.0E-06	BF370000.1	EST_HUMAN	RC8-FN0019-280600-011-G11 FN0019 Homo sapiens cDNA
8136	20678	33588	1.51	9.0E-08	BE897258.1	EST_HUMAN	801437232F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3822423 5'
487	15415	25592	1.19	8.0E-08	BE907807.1	EST_HUMAN	801497808F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3889781 5'
487	15415	25593	1.19	8.0E-08	BE907807.1	EST_HUMAN	801497808F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3889781 5'
5702	18328		2.71	8.0E-08	AW836047.1	EST_HUMAN	PMO-LT0019-090300-002-409 LT0019 Homo sapiens cDNA
3980	16578	28048	0.99	7.0E-06	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
3360	15888	28445	1.85	6.0E-08	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
3528	16134	28814	11.93	6.0E-08	M28873.1	NT	Human glyceraldehyde-3-phosphate dehydrogenase pseudogene 3' end

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5620	18444	31166	0.85	6.0E-06	11422642	NT	Homo sapiens sialyltransferase 6 (N-acetylglucosaminidase alpha 2,3-sialyltransferase) (SIAT6), mRNA
11420	23871	36832	2.52	6.0E-06	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
11420	23871	36833	2.52	6.0E-06	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
11461	23811	36878	1.98	6.0E-06	8923839	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
342	12864	25478	2.86	5.0E-06	AB032988.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
875	13489	26005	3.61	5.0E-06	AB032988.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
876	13489	26006	3.61	5.0E-06	AB032988.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
2650	15209		0.91	5.0E-06	11416787	NT	Homo sapiens phosphodiesterase 8A, cGMP-specific, rod, alpha (PDE8A), mRNA
3061	15677	28151	0.59	5.0E-06	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
5030	17604		1.8	6.0E-06	X60812.1	NT	H. sapiens DNA for monomine oxidase type A (7) (partial)
6758	19351	32160	1.1	5.0E-06	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
6878	19612	32445	4.05	5.0E-06	11424399	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
6878	19612	32446	4.05	5.0E-06	11424399	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
7060	19601	32501	0.79	5.0E-06	AB023177.1	NT	Homo sapiens mRNA for KIAA0960 protein, partial cds
7524	20044	32914	1.7	5.0E-06	AB024334.1	NT	Homo sapiens mRNA for 14-3-3gamma, complete cds
8050	20592	33499	1.62	5.0E-06	M88347.1	NT	Human type IV collagenase (CLG4B) gene, exon 5
8050	20592	33500	1.62	5.0E-06	M88347.1	NT	Human type IV collagenase (CLG4B) gene, exon 5
11618	24060	37124	1.68	5.0E-06	7661973	NT	Homo sapiens KIAA0175 gene product (KIAA0175), mRNA
4289	16855		8.01	3.0E-06	H89658.1	EST_HUMAN	Yr67H12.1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:212327 5'
440	13073		3.68	2.0E-06	4503086	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
777	13398	25887	1.52	2.0E-06	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
4871	17447	29808	1.58	2.0E-06	BE148074.1	EST_HUMAN	RC3-H10230-040500-110-g02 H10230 Homo sapiens cDNA
8911	21449		5.45	2.0E-06	AV688481.1	EST_HUMAN	AV688481 GKC Homo sapiens cDNA clone GKC/GMD07 5'
11785	24176		1.71	2.0E-06	AW249440.1	EST_HUMAN	2818351.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2818351 5'
699	13321	25808	2.62	1.0E-06	Y18880.1	NT	Human endogenous retrovirus type K (HERV-K), gag, pol and env genes
1817	14407	28951	3.32	1.0E-06	AW955054.1	EST_HUMAN	EST367124 MAGC resequences, MAGC Homo sapiens cDNA
1817	14407	28952	3.32	1.0E-06	AW955054.1	EST_HUMAN	EST367124 MAGC resequences, MAGC Homo sapiens cDNA
2272	14846	27421	1.3	1.0E-06	M75967.1	NT	Human hepatocyte growth factor gene, exon 1
2272	14846	27422	1.3	1.0E-06	M75967.1	NT	Human hepatocyte growth factor gene, exon 1
2306	15398	27455	1.1	1.0E-06	U51472.2	NT	Felis catus superfast myosin heavy chain (smMyHC) mRNA, complete cds
7045	18085	30455	1.06	1.0E-06	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
8154	20695	33608	0.9	1.0E-06	7661803	NT	Homo sapiens HSPC144 protein (HSPC144), mRNA
8154	20695	33609	0.9	1.0E-06	7661803	NT	Homo sapiens HSPC144 protein (HSPC144), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8650	21189	34107	22.03	1.0E-98	11419428	NT	Homo sapiens similar to ectonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC63214), mRNA
8784	21323	34247	2.21	1.0E-98	AF274883.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
10064	22559	35553	0.87	1.0E-98	AB033116.1	NT	Homo sapiens mRNA for KIAA1280 protein, partial cds
10064	22559	35554	0.87	1.0E-98	AB033116.1	NT	Homo sapiens mRNA for KIAA1280 protein, partial cds
11781	18023	30404	2.58	1.0E-98	4826893	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
11781	18023	30405	2.58	1.0E-98	4826893	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
3370	15978	28455	0.62	6.0E-97	BF245240.1	EST_HUMAN	601863712F1 NIH_MGC 57 Homo sapiens cDNA clone IMAGE:4081202 5'
7558	20078		2.76	6.0E-97	BE141849.1	EST_HUMAN	IL5-HT0117-011089-004-D07 HT0117 Homo sapiens cDNA
8884	21403	34327	0.74	6.0E-97	BE888012.1	EST_HUMAN	601440317F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:3925133 5'
8884	21403	34328	0.74	6.0E-97	BE888012.1	EST_HUMAN	601440317F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:3925133 5'
10486	22980	35987	0.52	6.0E-97	AA320332.1	EST_HUMAN	EST22672 Adipose tissue, white II Homo sapiens cDNA 5' end
10486	22980	35988	0.52	6.0E-97	AA320332.1	EST_HUMAN	EST22672 Adipose tissue, white II Homo sapiens cDNA 5' end
11284	23737	36783	1.8	6.0E-97	X15804.1	NT	Human mRNA for alpha-actinin
7957	20499	33409	2.45	5.0E-97	AL043314.2	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: hhes3) Homo sapiens cDNA clone IMAGE:767758 3' similar to TR:G1304125
8085	20628	33540	12.84	5.0E-97	AA18028.1	EST_HUMAN	z697e12.s1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:767758 3' similar to TR:G1304125
8593	22093	35057	2.67	5.0E-97	BF154912.1	EST_HUMAN	G1304125 PMS4 mRNA ;
11421	23872	36934	1.89	5.0E-97	BE149597.1	EST_HUMAN	RCO-BT0812-250500-032-409 BT0812 Homo sapiens cDNA
11421	23872	36935	1.89	5.0E-97	BE149597.1	EST_HUMAN	MRO-HT0241-150500-010-502 HT0241 Homo sapiens cDNA
975	13587	28102	6.89	4.0E-97	BE004438.1	EST_HUMAN	MRO-HT0241-150500-010-502 HT0241 Homo sapiens cDNA
1953	14537	27093	0.97	4.0E-97	5453572	NT	CWO-BND105-170300-283-406 BN0106 Homo sapiens cDNA
5754	18380	31091	17.27	4.0E-97	4557328	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
6912	19571	32399	6.05	4.0E-97	Y11339.2	NT	Homo sapiens apolipoprotein H (beta-2-glycoprotein I) (APOH) mRNA
6912	19571	32400	6.05	4.0E-97	Y11339.2	NT	Homo sapiens mRNA for GalNAc alpha-2, 8-sialyltransferase 1, long form
7088	18659	32498	1.01	4.0E-97	7710125	NT	Homo sapiens mRNA for GalNAc alpha-2, 8-sialyltransferase 1, long form
							Homo sapiens ligase III, DNA, ATP-dependent (LK33), transcript variant alpha, mRNA
							Homo sapiens cystic fibrosis transmembrane conductance regulator, ATP-binding cassette (sub-family C, member 7) (CFTR), mRNA
7128	19468	32286	1.01	4.0E-97	11422155	NT	Homo sapiens cyclic fibrosis transmembrane conductance regulator, ATP-binding cassette (sub-family C, member 7) (CFTR), mRNA
7778	20288	33188	0.74	4.0E-97	10947053	NT	Homo sapiens ankyrin 2, neuronal (ANK2), transcript variant 2, mRNA
7778	20288	33187	0.74	4.0E-97	10947053	NT	Homo sapiens ankyrin 2, neuronal (ANK2), transcript variant 2, mRNA
8078	20820	33533	0.84	4.0E-97	4557708	NT	Homo sapiens laminin, alpha 2 (merosin, congenital muscular dystrophy) (LAMA2) mRNA
8289	20840	33761	1.57	4.0E-97	11421793	NT	Homo sapiens v-src avian sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (SRC), mRNA
8555	21094	34014	0.73	4.0E-97	11423233	NT	Homo sapiens cytochrome P450, subfamily 1B, polypeptide 1 (CYP4B1), mRNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9172	21749	34682	1.23	4.0E-07	AB011186.1	NT	Homo sapiens mRNA for KIAA0504 protein, partial cds
9172	21749	34683	1.23	4.0E-07	AB011186.1	NT	Homo sapiens mRNA for KIAA0594 protein, partial cds
10333	22827	35822	0.75	4.0E-07	11431060	NT	Homo sapiens N-myc (and STAT) interactor (NMI), mRNA
11042	23556	36591	1.85	4.0E-07	11863122	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA
11042	23556	36592	1.85	4.0E-07	11863122	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA
11977	24288		4.75	4.0E-07	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
264	12922	25408	2.37	3.0E-07	AB032908.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
907	13521	26039	8.51	3.0E-07	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
907	13521	26040	8.51	3.0E-07	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
1480	15443	26623	2.15	3.0E-07	4758813	NT	Homo sapiens N-myc (and STAT) interactor (NMI), mRNA
2483	15400	27618	1.38	3.0E-07	U38255.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 7
3206	15817	28293	37.82	3.0E-07	K02212.1	NT	Human alpha-1-antitrypsin gene (S variant), complete cds
3289	15910	28389	1.48	3.0E-07	5174478	NT	Homo sapiens pericentriin (PCNT) mRNA
3893	16492	28952	1.04	3.0E-07	AF136523.1	NT	Homo sapiens bile salt export pump (BSEP) mRNA, complete cds
4894	17469	29925	28.9	1.0E-07	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
6558	19156	31952	2.38	1.0E-07	BE599486.1	EST_HUMAN	601339520F1 NIH_MGC 63 Homo sapiens cDNA clone IMAGE:3681821 5'
9085	20304	33206	0.6	1.0E-07	AW378978.1	EST_HUMAN	RCO-HT0258-211189-011-g05 HT0258 Homo sapiens cDNA
9085	20304	33207	0.6	1.0E-07	AW378978.1	EST_HUMAN	RCO-HT0258-211189-011-g05 HT0258 Homo sapiens cDNA
9679	22178	35153	1.21	1.0E-07	R10887.1	EST_HUMAN	Y38c08.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:129134 3'
10584	23119	36134	4.07	1.0E-07	11427757	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA
10584	23119	36135	4.07	1.0E-07	11427757	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA
11189	23694	36743	3.53	1.0E-07	AA563781.1	EST_HUMAN	h22902.61 NCI_OGAP_Co11 Homo sapiens cDNA clone IMAGE:1014982 3'
11343	23041	36050	18.96	1.0E-07	11426272	NT	Homo sapiens ribosomal protein S15 (RPS15), mRNA
11343	23041	36051	18.96	1.0E-07	11426272	NT	Homo sapiens ribosomal protein S15 (RPS15), mRNA
834	13547	28064	5.55	9.0E-08	BE090973.1	EST_HUMAN	PMA-B10724-010400-008-a12 BT0724 Homo sapiens cDNA
1319	13913	26434	1.41	9.0E-08	8393092	NT	Homo sapiens cat eye syndrome critical region gene 1 (CECR1), mRNA
6445	19047		0.67	9.0E-08	AJ250713.1	NT	Homo sapiens CLDN12 gene for claudin-12
7865	20407	33314	7.35	9.0E-08	4758119	NT	Homo sapiens death-associated protein (DAP), mRNA
7865	20407	33315	7.35	9.0E-08	4758119	NT	Homo sapiens death-associated protein (DAP), mRNA
9044	21581	34510	2	9.0E-08	X06989.1	NT	Human mRNA for amyloid A4(751) protein
9151	21688	34629	1.94	9.0E-08	11321680	NT	Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCLG1), mRNA
9216	21733	34676	1.46	9.0E-08	AB037786.1	NT	Homo sapiens mRNA for KIAA1365 protein, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9282	21788		1.25	9.0E-08	AF057728.1	NT	Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, exon 8
9289	21889	34835	1.15	9.0E-08	4507070	NT	Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 3 (SMARCA3) mRNA
9289	21889	34836	1.15	9.0E-08	4507070	NT	Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 3 (SMARCA3) mRNA
10181	22650	35651	0.54	9.0E-08	AF141325.2	NT	Homo sapiens inositol polyphosphate 1-phosphatase (INPP1) gene, complete cds
10208	22763	35750	0.5	9.0E-08	11431544	NT	Homo sapiens protease-activated receptor 3 (PAR3), mRNA
10863	23404	38422	2.37	9.0E-08	AB023222.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
10883	23404	38423	2.37	9.0E-08	AB023222.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
11894	13547	26064	4.29	9.0E-08	BE080873.1	EST_HUMAN	PMA-BT0724-010400-008-a12 BT0724 Homo sapiens cDNA
27	12708		0.82	9.0E-08	AJ251158.1	NT	Homo sapiens partial MICB gene for MHC class I chain-related protein B, exons 2-3 and joined CDS
1607	14199	26732	1.04	8.0E-08	5031810	NT	Homo sapiens IL2-inducible T-cell kinase (ITK), mRNA
1607	14199	26733	1.04	8.0E-08	5031810	NT	Homo sapiens IL2-inducible T-cell kinase (ITK), mRNA
1764	14354	26800	1.84	8.0E-08	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
1764	14354	26801	1.84	8.0E-08	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
3883	18461	26825	7.16	8.0E-08	J04469.1	NT	Human mitochondrial creatine kinase (CKMT) gene, complete cds
5276	17838		1.43	8.0E-08	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
6233	18842	31614	1.18	5.0E-08	BE885873.1	EST_HUMAN	601507503F1 NIH_MGC 71 Homo sapiens cDNA clone IMAGE:3908097 5'
12398	24558	30608	1.68	4.0E-08	BE348727.1	EST_HUMAN	h88802.x1 NCI_OGAP_Lu24 Homo sapiens cDNA clone IMAGE:3151899 3'
2222	14797	27370	1.15	3.0E-08	AJ403124.1	EST_HUMAN	AJ403124 3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone 18
2639	15188	27772	1.67	3.0E-08	AB014907.1	NT	Homo sapiens mRNA for KIAA0707 protein, partial cds
2777	15330		1.97	3.0E-08	AA077498.1	EST_HUMAN	7B18H01 Chromosome 7 Fetal Brain cDNA Library/Homo sapiens cDNA clone 7B18H01
7026	19560	32386	1.66	3.0E-08	11418210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
7026	19560	32387	1.66	3.0E-08	11418210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
8686	21225	34145	3.05	3.0E-08	H46688.1	EST_HUMAN	yo17g08.r1 Soares adult brain N255HB50Y Homo sapiens cDNA clone IMAGE:178240 5'
9221	21737	34679	0.77	3.0E-08	8922068	NT	Homo sapiens uncharacterized bone marrow protein BM039 (BM039), mRNA
9786	22296	35279	1.8	3.0E-08	AJ403124.1	EST_HUMAN	AJ403124 3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone 18
9786	22296	35280	1.8	3.0E-08	AJ403124.1	EST_HUMAN	AJ403124 3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone 18
10369	22883	35856	0.86	3.0E-08	BE000454.1	EST_HUMAN	601873886F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3956517 5'
10831	23352	36367	3.79	3.0E-08	U93009.1	NT	Human fumarylase precursor (FH) mRNA, nuclear gene encoding mitochondrial protein, complete cds
12588	24885		5.13	3.0E-08	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
765	13384	25883	0.81	2.0E-08	BE261694.1	EST_HUMAN	601149486F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502245 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2124	14702	27272	3.36	2.0E-08	BE284281.1	EST_HUMAN	801172858F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3528134 5'
2279	14853	27431	1.37	2.0E-08	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
4384	16971	28419	0.74	2.0E-08	AF032887.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
4432	17018	28458	4.65	2.0E-08	4758331	NT	Homo sapiens fatty-acid-Coenzyme A ligase, long-chain 4 (FACL4) mRNA
4953	17528	28868	0.86	2.0E-08	AF218902.1	NT	Homo sapiens attractin precursor (ATRIN) gene, exon 16
4953	17528	28869	0.86	2.0E-08	AF218902.1	NT	Homo sapiens attractin precursor (ATRIN) gene, exon 16
5579	18210	30860	4.63	2.0E-08	7706512	NT	Homo sapiens PDZ domain-containing guanine nucleotide exchange factor 1 (LOC51735), mRNA
6761	19354	32163	1.03	2.0E-08	4505798	NT	Homo sapiens phosphatidylinositol 3-kinase, class 2, alpha polypeptide (PIK3C2A) mRNA
7619	20132	33008	1.13	2.0E-08	11431271	NT	Homo sapiens hypothetical protein FLJ10488 (FLJ10488), mRNA
7619	20132	33008	1.13	2.0E-08	11431271	NT	Homo sapiens hypothetical protein FLJ10488 (FLJ10488), mRNA
8544	21083	34004	3.84	2.0E-08	11428813	NT	Homo sapiens SH3-domain GRB2-like 2 (SH3GL2), mRNA
8544	21083	34005	3.84	2.0E-08	11428813	NT	Homo sapiens SH3-domain GRB2-like 2 (SH3GL2), mRNA
8625	21164	34078	0.62	2.0E-08	L76866.1	NT	Homo sapiens NKAT4b mRNA, complete cds
8625	21164	34079	0.62	2.0E-08	L76866.1	NT	Homo sapiens NKAT4b mRNA, complete cds
9458	21882	34834	3.9	2.0E-08	X12884.1	NT	H. sapiens arginase gene exon 3 (EC 3.5.3.1)
10312	22808		1.31	2.0E-08	7705888	NT	Homo sapiens AIM-1 protein (LOC51151), mRNA
11078	23590	38628	1.6	2.0E-08	U22028.1	NT	Human cytochrome P450 (CYP2A13) gene, complete cds
11899	24305	30889	1.62	2.0E-08	11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
430	13083	25558	57.29	1.0E-08	A1882007.1	EST_HUMAN	hw36604.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2261743 3' similar to SW:FL28_HUMAN
480	13113	25603	2.16	1.0E-08	AW988611.1	EST_HUMAN	P29316 60S RIBOSOMAL PROTEIN L23A ;
1832	14420	28670	13.48	1.0E-08	N48818.1	EST_HUMAN	PMO-BN0065-100300-001-c06 BN0065 Homo sapiens cDNA
5520	18152	30566	3.14	1.0E-08	AA195854.1	EST_HUMAN	W23705.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:243585 5' similar to
5758	18384	31067	1.12	1.0E-08	BE380627.1	EST_HUMAN	PIR:SS4204 S54204 ribosomal protein L29 - human ;
5758	18384	31068	1.12	1.0E-08	BE380627.1	EST_HUMAN	z988-c08.r1 Stratiotes muscled 837209 Homo sapiens cDNA clone IMAGE:628240 5' similar to TR:G806582
8828	21466	34383	8.27	1.0E-08	AF141349.1	NT	G806582 NEBULIN ;
8828	21466	34384	8.27	1.0E-08	AF141349.1	NT	
5684	18604	31338	0.93	9.0E-09	A1805004.1	EST_HUMAN	QV-BT073-191288-012 BT073 Homo sapiens cDNA
5684	18604	31339	0.93	9.0E-09	A1805004.1	EST_HUMAN	QV-BT073-191288-012 BT073 Homo sapiens cDNA
6191	18801	31571	4.33	9.0E-09	AW988635.1	EST_HUMAN	EST380711 IMAGE resequences, MAGJ Homo sapiens cDNA
11001	23515	36549	3.39	9.0E-09	A479829.1	EST_HUMAN	Int68407.x1 NCI_CGAP_Bn25 Homo sapiens cDNA clone IMAGE:2163421 3' similar to SW:BD_HUMAN
							P55957 BH3 INTERACTING DOMAIN DEATH AGONIST ;

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11001	23515	36550	3.38	9.0E-08	A1478828.1	EST_HUMAN	tm80407.x1 NC1 CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2163421 3' similar to SW581D_HUMAN
11292	23744	36801	1.97	9.0E-08	AA134804.1	EST_HUMAN	P55957 BH3 INTERACTING DOMAIN DEATH AGONIST ;
11827	24089	37133	2.11	9.0E-08	AJ271736.1	NT	z180002.11 Stragene lung carcinoma 637218 Homo sapiens cDNA clone IMAGE:565443 5' similar to
5661	21200	34118	1.59	8.0E-08	8035487	NT	TR:G882384 G882384 GPI-ANCHORED PROTEIN P137 ;
5969	18619	31355	10.3	7.0E-08	AF035808.1	NT	Homo sapiens Xq pseudautosomal region; segment 272
11477	23927	36898	2.52	7.0E-08	AF001886.1	NT	Human endogenous retrovirus, complete genome
497	13128	25618	0.57	8.0E-08	U10891.1	NT	Homo sapiens oscillin (NLN) gene, exon 5
4859	17437	29887	1.3	8.0E-08	4502860	NT	Homo sapiens NK-receptor (KIR-G2) gene, linker region exon
5382	17941	30355	1.01	8.0E-08	8823244	NT	Human G2 protein mRNA, partial cds
6711	19305	32109	1	8.0E-08	7708138	NT	Homo sapiens CD34 antigen (CD34) mRNA
6780	19371	32188	1.39	8.0E-08	L43610.1	NT	Homo sapiens hypochelated protein FLJ20272 (FLJ20272), mRNA
6780	19371	32187	1.39	8.0E-08	L43610.1	NT	Homo sapiens GAP-like protein (LOC51309), mRNA
8048	20560	33487	1.11	8.0E-08	X98101.1	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
8700	21239	34162	1.88	8.0E-08	AB030429.1	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
8787	21338	34281	4.03	8.0E-08	AF080255.1	NT	H. sapiens mRNA for estrogen receptor
8787	21338	34282	4.03	8.0E-08	AF080255.1	NT	Homo sapiens NDST4 mRNA for N-deacetylase/N-sulfotransferase 4, complete cds
8854	21383	34315	0.62	8.0E-08	11431894	NT	Homo sapiens testator protein mRNA, complete cds
8854	21383	34318	0.62	8.0E-08	11431894	NT	Homo sapiens testator protein mRNA, complete cds
10598	23132	36146	4.18	8.0E-08	11528289	NT	Homo sapiens inositol 1,4,5-triphosphate receptor, type 1 (ITPR1), mRNA
953	13565	26077	9.63	5.0E-08	U35484.1	NT	Homo sapiens inositol 1,4,5-triphosphate receptor, type 1 (ITPR1), mRNA
953	13565	26078	9.63	5.0E-08	U35484.1	NT	Homo sapiens BH3 interacting domain death agonist (BID), mRNA
2007	14589	27149	1.33	5.0E-08	Y11395.1	NT	Human protein C inhibitor (PCI-B) mRNA, complete cds
4683	17245	29689	1.44	5.0E-08	AF008660.1	NT	Human protein C inhibitor (PCI-B) mRNA, complete cds
12009	24311		2.1	5.0E-08	BE880177.1	EST_HUMAN	H. sapiens IMPA gene, exon 8
8263	20804		5.49	3.0E-08	M85586.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
1282	13878		15.39	2.0E-08	AW274782.1	EST_HUMAN	601513157F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914391 5'
3297	15908	28388	1.27	2.0E-08	M30638.1	NT	Human E2AHLA fusion protein (E2AHLF) mRNA, complete cds
4641	17223	29677	1.67	2.0E-08	AF098703.1	NT	xp09806.x1 NC1 CGAP_HIN8 Homo sapiens cDNA clone IMAGE:2739874 3' similar to gb:M31212 MYOSIN
7687	20179	33068	1.28	2.0E-08	AF257737.1	NT	LIGHT CHAIN ALKALI, NON-MUSCLE ISOFORM (HUMAN);
							Human Ku (p70/p80) subunit mRNA, complete cds
							Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene
							encoding mitochondrial protein, complete cds
							Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8841	21180	34100	9.83	2.0E-88	W23507.1	EST_HUMAN	zb46406.1 Soares fetal lung NBHL19W Homo sapiens cDNA clone IMAGE:308635 5' similar to
8878	21615	34550	0.63	2.0E-88	R78254.1	EST_HUMAN	gb:M16182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
10884	23498	36528	3.8	2.0E-88	AF247457.2	NT	y81809.1 Soares placenta Nb2-HP Homo sapiens cDNA clone IMAGE:145625 5'
11617	24058	37123	1.61	2.0E-88	10863960	NT	Homo sapiens myosin X (MYO10) mRNA, complete cds
337	12889	25476	1.46	1.0E-88	AF114487.1	NT	Homo sapiens potassium channel, subfamily K, member 10 (KCNK10), mRNA
402	13048	25537	1.21	1.0E-88	11528150	NT	Homo sapiens intersecin long isoform (ITSN) mRNA, complete cds
1468	14058	28582	2.52	1.0E-88	M30838.1	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (60KD) (GABPA), mRNA
1803	14185	28728	2.14	1.0E-88	AF182523.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
1803	14195	28727	2.14	1.0E-88	AF182523.1	NT	Homo sapiens truncated Niemann-Pick C3 protein (NPC3) mRNA, complete cds
1971	14555	27111	0.81	1.0E-88	4503730	NT	Homo sapiens FK506-binding protein 6 (38kD) (FKBP6) mRNA, complete cds
1971	14555	27112	0.81	1.0E-88	4503730	NT	Homo sapiens FK506-binding protein 6 (38kD) (FKBP6) mRNA, and translated products
3121	15735	28204	0.9	1.0E-88	J03171.1	NT	Homo sapiens FK506-binding protein 6 (38kD) (FKBP6) mRNA, and translated products
4469	17055	28488	2.88	1.0E-88	AF088018.1	NT	Human interferon-alpha receptor (HuIFN-alpha-R) mRNA, complete cds
4469	17055	28500	2.88	1.0E-88	AF088018.1	NT	Homo sapiens fatty acid amide hydrolase (FAAH) gene, exon 14
6888	19830	32487	2.18	1.0E-88	11421007	NT	Homo sapiens fatty acid amide hydrolase (FAAH) gene, exon 14
6898	19830	32488	2.18	1.0E-88	11421007	NT	Homo sapiens glycine receptor, alpha 2 (GLRA2), mRNA
7183	24778	32574	0.8	1.0E-88	X88022.1	NT	Homo sapiens glycine receptor, alpha 2 (GLRA2), mRNA
9127	21682		1.04	1.0E-88	11419721	NT	H. sapiens E8-AP gene exon 2
9439	21965	34914	1.81	1.0E-88	AW340174.1	EST_HUMAN	Homo sapiens ALEX1 protein (LOC51309), mRNA
11064	23578	36814	1.82	1.0E-88	5901979	NT	h02h02.1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2808371 3' similar to TR:002711
11255	23785	36841	2.94	1.0E-88	AB023222.1	NT	002711 PRO-POL-DUTPASE POLYPROTEIN;
11557	24005	37077	1.8	1.0E-88	AF223391.1	NT	Homo sapiens heat shock transcription factor 2 binding protein (HSF2BP), mRNA
11637	24078	37136	1.57	1.0E-88	AF223391.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
11764	24155		9.05	1.0E-88	AF240786.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
1	12682	26138	1.19	1.0E-100	AL163247.2	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
2	12682	26138	1.73	1.0E-100	AL163247.2	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
72	12750	25227	1.35	1.0E-100	11418230	NT	Homo sapiens chromosome 21 segment HS21C047
72	12750	25228	1.35	1.0E-100	11418230	NT	Homo sapiens chromosome 21 segment HS21C047
90	12766	25250	0.79	1.0E-100	AW275237.1	EST_HUMAN	Homo sapiens Testis-specific XK-related protein on Y (XKRY), mRNA
							Homo sapiens Testis-specific XK-related protein on Y (XKRY), mRNA
							av78b11.1 NC1_CGAP_Bim53 Homo sapiens cDNA clone IMAGE:2824605 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
180	12842	25328	1.18	1.0E-100	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
339	12891	25478	1.76	1.0E-100	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
365	13014	25497	2.06	1.0E-100	TD5087.1	EST_HUMAN	EST102875 Fetal brain, Siratigene (cath936206) Homo sapiens cDNA clone HFBCR32
482	13088		1.84	1.0E-100	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
515	13148		8.1	1.0E-100	X89631.1	NT	G.gallus DNA for ZNF80 gene homolog
535	13166	25647	1.78	1.0E-100	BE180609.1	EST_HUMAN	RC3-IT0625-040500-022-509 HT0625 Homo sapiens cDNA
1057	13882	28172	3.18	1.0E-100	7661885	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
1057	13882	28173	3.18	1.0E-100	7661885	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
1483	14078	28814	0.93	1.0E-100	BF530735.1	EST_HUMAN	602072084F1 NCI_CGAP_Bn67 Homo sapiens cDNA clone IMAGE:4215039 5'
1594	14187		2.49	1.0E-100	AW207555.1	EST_HUMAN	U1-H-B11-alk-c-07-Q.U1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722164 3'
1598	14190	28721	1.32	1.0E-100	AI200857.1	EST_HUMAN	q162109.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1754633 3' similar to SW:CYT_COTJA
2284	14858		2.78	1.0E-100	D83349.1	NT	P81081 CYSTATIN 1
2482	15048	27817	0.87	1.0E-100	X82468.1	NT	Rat mRNA for short type PB-cadherin, complete cds
2731	15286	27853	2.8	1.0E-100	11418878	NT	H. sapiens mRNA for IFN-gamma (pKC-0)
3053	15689		3.02	1.0E-100	D11078.1	NT	Homo sapiens KIAA0957 protein (KIAA0957), mRNA
4289	16875	29324	1.83	1.0E-100	AF075354.1	NT	Homo sapiens RGH2 gene, retrovirus-like element
4320	16906	29348	2.06	1.0E-100	4503782	NT	Homo sapiens myotubularin-related protein 1a mRNA, partial cds
5253	17816	30239	3.16	1.0E-100	5032104	NT	Homo sapiens follicle stimulating hormone receptor (FSHR) mRNA
5253	17816	30240	3.16	1.0E-100	5032104	NT	Homo sapiens small optic lobes (Drosophila) homolog (SOLH) mRNA
5493	18127	30535	1.55	1.0E-100	BF244218.1	EST_HUMAN	Homo sapiens small optic lobes (Drosophila) homolog (SOLH) mRNA
5699	18325	30828	0.87	1.0E-100	AW075983.1	EST_HUMAN	601883164F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4080989 5'
5879	18501	31227	1.93	1.0E-100	AU118182.1	EST_HUMAN	xa82101.x1 NCI_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2573305 3' similar to gb:X12433
5820	18542	31288	1.38	1.0E-100	AF135116.1	NT	PROTEIN PHPS1-2 (HUMAN);
6003	18823	31358	10.01	1.0E-100	X14680.1	NT	AU118182 HEMBA1 Homo sapiens cDNA clone HEMBA1003048 5'
6311	18918	31682	1.06	1.0E-100	4557568	NT	Homo sapiens NF-E2-related factor 3 gene, complete cds
6311	18918	31683	1.06	1.0E-100	4557568	NT	Human mRNA for plasma inter-alpha-typein inhibitor heavy chain H(3)
6566	19164		1.29	1.0E-100	5728867	NT	Homo sapiens ER to nucleus signalling 1 (ERN1) mRNA
6823	19220	32025	5.02	1.0E-100	AU140214.1	EST_HUMAN	Homo sapiens ER to nucleus signalling 1 (ERN1) mRNA
6787	19378	32193	1.46	1.0E-100	R10887.1	EST_HUMAN	Homo sapiens ER to nucleus signalling 1 (ERN1) mRNA
6868	19800	32431	2.42	1.0E-100	7382479	NT	Homo sapiens ER to nucleus signalling 1 (ERN1) mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6829	19588	32417	1.2	1.0E-100	AA488841.1	EST_HUMAN	aa33506.r1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:897587 5' similar to TR:G487418
6829	19588	32418	1.2	1.0E-100	AA488841.1	EST_HUMAN	G487418 ACTIN FILAMENT-ASSOCIATED PROTEIN.;
6868	19543	32368	1.25	1.0E-100	BF378478.1	EST_HUMAN	G487418 ACTIN FILAMENT-ASSOCIATED PROTEIN.;
6868	19543	32367	1.25	1.0E-100	BF378478.1	EST_HUMAN	MR1-TN0046-060800-004-b05 TN0046 Homo sapiens cDNA
6874	19550	32375	8.47	1.0E-100	X04571.1	NT	MR1-TN0046-060800-004-b05 TN0046 Homo sapiens cDNA
8469	21009	33928	12.09	1.0E-100	BF103853.1	EST_HUMAN	Human mRNA for kidney epidermal growth factor (EGF) precursor
8503	21042		4.61	1.0E-100	AL163203.2	NT	601647357F1 NIH_MGC_61 Homo sapiens cDNA clone IMAGE:3931310 5'
8944	21482	34404	0.67	1.0E-100	AU116851.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
8944	21482	34405	0.67	1.0E-100	AU116851.1	EST_HUMAN	AU116851 HEMBA1 Homo sapiens cDNA clone HEMBA1000343 5'
9159	21694	34638	3.35	1.0E-100	AB040918.1	NT	AU116851 HEMBA1 Homo sapiens cDNA clone HEMBA1000343 5'
9234	21956		1.98	1.0E-100	A1972388.1	EST_HUMAN	Homo sapiens mRNA for KIAA1495 protein, partial cds
9354	20283	33182	1.66	1.0E-100	AW698611.1	EST_HUMAN	wt37g08.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2488820 3' similar to contains element
9407	21916		1.74	1.0E-100	AU127720.1	EST_HUMAN	MER22 repetitive element.;
9504	22004	34981	2.84	1.0E-100	AB046846.1	NT	PM0-BN0065-100300-001-c08 BN0065 Homo sapiens cDNA
9504	22004	34982	2.84	1.0E-100	AB046846.1	NT	AU127720 NT2RP2 Homo sapiens cDNA clone NT2RP2001918 5'
9757	22255	35237	1.91	1.0E-100	AW630487.1	EST_HUMAN	Homo sapiens mRNA for KIAA1628 protein, partial cds
9757	22255	35238	1.91	1.0E-100	AW630487.1	EST_HUMAN	Homo sapiens mRNA for KIAA1628 protein, partial cds
9817	22413	35388	0.5	1.0E-100	AV732101.1	EST_HUMAN	h83c11.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2869396 5'
10368	22690	35953	1.49	1.0E-100	BF347518.1	EST_HUMAN	h83c11.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2869396 5'
10452	22946		1.38	1.0E-100	Y10391.1	NT	AV732101 HTF Homo sapiens cDNA clone HTFBIG01 5'
10638	23170	36181	7.36	1.0E-100	BF327292.1	EST_HUMAN	602020554F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4150165 5'
11168	23673	36719	2.59	1.0E-100	X04633.1	NT	Human endogenous retrovirus HERV-K, pol gene
11168	23673	36720	2.59	1.0E-100	X04633.1	NT	MIR0-BN0070-270300-008-h11 BN0070 Homo sapiens cDNA
11232	23763	36818	4.28	1.0E-100	AF111170.3	NT	H. sapiens CD97 gene exon 4
11232	23763	36819	4.28	1.0E-100	AF111170.3	NT	H. sapiens CD97 gene exon 4
11261	12682	25138	2.14	1.0E-100	AL163247.2	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
11529	23977		1.65	1.0E-100	AF268285.1	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
11683	24100	37150	9.41	1.0E-100	AF240788.1	NT	Homo sapiens chromosome 21 segment HS21C047
12000	24306	30900	2.92	1.0E-100	11545732	NT	Homo sapiens poligin-like protein (GLP) gene, complete cds
12642	24717	30868	3.53	1.0E-100	11417674	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
							Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
							Homo sapiens transcobalamin II; macrocytic anemia (TCN2), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
81	12758	26240	2.04	1.0E-101	7110714	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
81	12758	26241	2.04	1.0E-101	7110714	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
715	13336	26822	1.77	1.0E-101	AB007815.2	NT	Homo sapiens mRNA for KIAA0446 protein, partial cds
733	13353	25848	5.29	1.0E-101	7110734	NT	Homo sapiens ventral anterior hornedbox 2 (VAX2), mRNA
733	13353	25849	5.29	1.0E-101	7110734	NT	Homo sapiens ventral anterior hornedbox 2 (VAX2), mRNA
803	13420	25825	3.37	1.0E-101	7657454	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
888	13500	26018	1.98	1.0E-101	4503914	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminimidazole synthetase (GART) mRNA
961	13572	26088	0.88	1.0E-101	Z20658.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
1022	13632	28149	24.99	1.0E-101	BF681218.1	EST_HUMAN	602156474F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4287291 5'
1090	13666	26204	1.59	1.0E-101	AI221878.1	EST_HUMAN	cg88e09.x1 Scarae_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843338 3'
1782	14372	26917	0.9	1.0E-101	7662183	NT	Homo sapiens KIAA0568 gene product (KIAA0568), mRNA
1782	14372	26918	0.9	1.0E-101	7662183	NT	Homo sapiens KIAA0568 gene product (KIAA0568), mRNA
1898	14570	27132	1.64	1.0E-101	4502988	NT	Homo sapiens carboxypeptidase A1 (pancreatic) (CPA1) mRNA
2101	14680	27248	1.93	1.0E-101	BE843070.1	EST_HUMAN	RC3-ST0281-180600-018-h09 ST0281 Homo sapiens cDNA
2388	15465	27528	1.24	1.0E-101	5728892	NT	Homo sapiens A kinase (PRKA) anchor protein 6 (AKAP6), mRNA
2846	16205	27778	10.93	1.0E-101	X72883.1	NT	H. sapiens EWS gene, exon 5
2771	15324	27891	2.71	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
2771	15324	27892	2.71	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
2862	15598		10.39	1.0E-101	AJ252312.1	NT	Homo sapiens genomic downstream Rhesus box
3237	15849	28330	2.82	1.0E-101	4885270	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1) mRNA
3278	15989		2.37	1.0E-101	BF035327.1	EST_HUMAN	60145831F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3862086 5'
3427	16035	28515	1.94	1.0E-101	AW966558.1	EST_HUMAN	EST377629 MAGE resequences, MAGI Homo sapiens cDNA
3447	15324	27891	2.83	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
3447	15324	27892	2.83	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
3945	16543	29010	4.29	1.0E-101	AB022785.1	NT	Homo sapiens ASH2L gene, complete cds, similar to Drosophila ash2 gene
5185	17750	30180	1.38	1.0E-101	5821460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
5185	17750	30181	1.38	1.0E-101	5821460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
5521	18153	30587	1.26	1.0E-101	AW966539.1	EST_HUMAN	EST377212 MAGE resequences, MAGI Homo sapiens cDNA
6154	18767	31530	3.48	1.0E-101	7427512	NT	Homo sapiens cytoplasmic linker 2 (CYLN2), mRNA
6154	18767	31531	3.48	1.0E-101	7427512	NT	Homo sapiens cytoplasmic linker 2 (CYLN2), mRNA
6798	19387	32203	1.06	1.0E-101	11430734	NT	Homo sapiens carbonic anhydrase VII (CA7), mRNA
7317	19844		1.18	1.0E-101	11545780	NT	Homo sapiens hypothetical protein FLJ22087 (FLJ22087), mRNA
7361	19887	32749	4.87	1.0E-101	AF208970.1	NT	Homo sapiens Kruppel-type zinc finger protein (PE33) mRNA, alternative splice form 4, partial cds

Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7361	18887	32750	4.87	1.0E-101	AF208970.1	NT	Homo sapiens Kruppel-type zinc finger protein (PEGS) mRNA, alternative splice form 4, partial cds
7481	20014	32880	11.88	1.0E-101	AW008475.1	EST_HUMAN	w55f12.x1 NCI CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2533487 3'
7578	20082		1.88	1.0E-101	BE257384.1	EST_HUMAN	601108217F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3348901 5'
7707	20218	33104	7.87	1.0E-101	BF330758.1	EST_HUMAN	RC1-BT0313-220700-018-f12 BT0313 Homo sapiens cDNA
7854	20398	33301	0.88	1.0E-101	BE275821.1	EST_HUMAN	601121621F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3345889 5'
7854	20398	33302	0.88	1.0E-101	BE275821.1	EST_HUMAN	601121621F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3345889 5'
7889	20541	33443	6.89	1.0E-101	BF028174.1	EST_HUMAN	6011784686F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3090837 5'
8284	20805	33722	0.88	1.0E-101	AW630070.1	EST_HUMAN	h174g10.y1 NCI CGAP_GU1 Homo sapiens cDNA clone IMAGE:288578 5' similar to gb:J03143
8284	20805	33723	0.88	1.0E-101	AW630070.1	EST_HUMAN	INTERFERON-GAMMA RECEPTOR ALPHA CHAIN PRECURSOR (HUMAN);
8940	21478	34369	1.55	1.0E-101	AA036800.1	EST_HUMAN	z628g08.l1 Soares_pregnant_uterus_Nih-FPU Homo sapiens cDNA clone IMAGE:471898 5' similar to PIR:354840 S54840 YD6335.03c protein - yeast;
9253	21778	34730	0.8	1.0E-101	AB037772.1	NT	Homo sapiens mRNA for KIAA1351 protein, partial cds
9253	21778	34731	0.8	1.0E-101	AB037772.1	NT	Homo sapiens mRNA for KIAA1351 protein, partial cds
9383	20321	33225	17.2	1.0E-101	X60089.1	NT	Human mRNA for pancreatic gamma-glutamyltransferase
9383	20321	33228	17.2	1.0E-101	X60089.1	NT	Human mRNA for pancreatic gamma-glutamyltransferase
9386	21819	34768	16.05	1.0E-101	8845492	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), transcript variant 3, mRNA
9672	22171	35146	12.54	1.0E-101	BE819887.1	EST_HUMAN	601472808T1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3875953 3'
9672	22171	35147	12.54	1.0E-101	BE819887.1	EST_HUMAN	601472808T1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3875953 3'
9808	22306	35280	0.65	1.0E-101	108633800	NT	Homo sapiens potassium channel, subfamily K, member 10 (KCNK10), mRNA
10308	22802	35784	1.71	1.0E-101	11429127	NT	Homo sapiens Janus kinase 2 (a protein tyrosine kinase) (JAK2), mRNA
10337	22831	35828	5.16	1.0E-101	AI570283.1	EST_HUMAN	h677d11.x1 NCI CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2184309 3' similar to gb:M26328
10337	22831	35828	5.16	1.0E-101	AI570283.1	EST_HUMAN	KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
10442	22836	35945	0.85	1.0E-101	BE973848.1	EST_HUMAN	h677d11.x1 NCI CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2184309 3' similar to gb:M26328
10442	22836	35946	0.85	1.0E-101	BE973848.1	EST_HUMAN	KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
10757	23281	36285	1.93	1.0E-101	S38327.1	NT	601680825F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950887 5'
10888	23502	36532	1.68	1.0E-101	AB020628.1	NT	601680825F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950887 5'
11620	24082	37128	18.03	1.0E-101	AA321316.1	EST_HUMAN	branched-chain alpha-keto acid dehydrogenase complex E1 alpha subunit [human, Genomic, 185 nt, segment 8 of 9]
12274	24478		15.98	1.0E-101	AW939051.1	EST_HUMAN	Homo sapiens mRNA for KIAA0819 protein, partial cds
43	12722	25183	0.8	1.0E-102	AF012872.1	NT	EST23783 Bone marrow Homo sapiens cDNA 5' end similar to defensin 1
							QV1-DT0088-240200-085-01 DT0088 Homo sapiens cDNA
							Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
363	13012	25494	4.36	1.0E-102	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
648	13271	25749	1.2	1.0E-102	BE252470.1	EST_HUMAN	601108292F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3344326 5'
807	13424	25930	1.24	1.0E-102	4557534	NT	Homo sapiens down-regulated in adenoma (DRA) mRNA
1158	13759	26269	5.78	1.0E-102	M10978.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
1311	13905	26424	3.09	1.0E-102	11437146	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
1311	13905	26425	3.09	1.0E-102	11437146	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
1327	13921	26442	1.92	1.0E-102	4828977	NT	Homo sapiens reelin (RELN) mRNA
1464	14056	26589	164.12	1.0E-102	BE408447.1	EST_HUMAN	60126982F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3628901 5'
2348	14918	27493	1.34	1.0E-102	AI124689.1	EST_HUMAN	arr60c10.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1539954 3' similar to SW:G085_HUMAN Q08379 GOLGIN-85;
2348	14919	27494	1.34	1.0E-102	AI124689.1	EST_HUMAN	arr60c10.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1539954 3' similar to SW:G085_HUMAN Q08379 GOLGIN-85;
3101	15718	28187	1.56	1.0E-102	7681979	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
3167	15781	28251	4.07	1.0E-102	AU141005.1	EST_HUMAN	AU141005 PLACE4 Homo sapiens cDNA clone PLACE4000650 5'
3167	15781	28252	4.07	1.0E-102	AU141005.1	EST_HUMAN	AU141005 PLACE4 Homo sapiens cDNA clone PLACE4000650 5'
4316	16902	29348	1.84	1.0E-102	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
4503	17097	29535	2.55	1.0E-102	BE251310.1	EST_HUMAN	601107843F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3343882 5'
5287	17849	30275	1.19	1.0E-102	R68488.1	EST_HUMAN	y93c04.t1 Soares placenta Nb21-IP Homo sapiens cDNA clone IMAGE:140834 5'
5574	18205	30656	1.68	1.0E-102	AF067133.1	NT	Homo sapiens protein phosphatase-1 regulatory subunit 7 (PPP1R7) gene, exon 7
5923	18545	31313	4.52	1.0E-102	AB034651.1	NT	Homo sapiens HSC54 mRNA for heat shock cognate protein 54, complete cds
5957	18579	31313	2.43	1.0E-102	7705388	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
5957	18579	31314	2.43	1.0E-102	7705388	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
5982	18694	31318	0.76	1.0E-102	11433046	NT	Homo sapiens hct domain and RLD 2 (HERC2), mRNA
6435	19038	31825	2.89	1.0E-102	AI459825.1	EST_HUMAN	arr208.x1 Barstead cdon HPLR87 Homo sapiens cDNA clone IMAGE:2151785 3' similar to TR:Q13137 Q13137 NDP52;
7180	19722	32570	0.67	1.0E-102	BE728323.1	EST_HUMAN	601591505F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3831241 5'
7217	19748	32604	0.83	1.0E-102	BE386106.1	EST_HUMAN	60127215F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3818243 5'
7392	19917	32781	7.37	1.0E-102	AJ238894.1	NT	Homo sapiens mRNA for Centaurin-alpha2 protein
7820	20133	33010	2.76	1.0E-102	AV710738.1	EST_HUMAN	AV710738 Cu Homo sapiens cDNA clone CUAAD003 5'
8165	20706	33622	3.41	1.0E-102	BE763051.1	EST_HUMAN	QV3-NT0026-210600-238-108 NT0026 Homo sapiens cDNA
8244	20785	33704	1.5	1.0E-102	BE910555.1	EST_HUMAN	601501107F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3903145 5'
8431	20971	33883	1.65	1.0E-102	AV684817.1	EST_HUMAN	AV684817 GK Homo sapiens cDNA clone GKCEE11 5'
8431	20971	33884	1.65	1.0E-102	AV684817.1	EST_HUMAN	AV684817 GK Homo sapiens cDNA clone GKCEE11 5'
8538	21078	33987	0.52	1.0E-102	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8881	21400	34324	0.75	1.0E-102	BE388063.1	EST_HUMAN	601283770F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3805538 5'
8881	21400	34325	0.75	1.0E-102	BE388063.1	EST_HUMAN	601283770F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3805538 5'
9175	21752	34888	0.57	1.0E-102	A1762859.1	EST_HUMAN	W63306.X1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2397871 3' similar to contains MER4.1
9205	21722	34868	0.76	1.0E-102	AV755842.1	EST_HUMAN	MER4 MER4 repetitive element ;
9245	21771	34719	2.15	1.0E-102	T70393.1	EST_HUMAN	AV755842 BM Homo sapiens cDNA clone BMFAUD08 5'
9245	21771	34720	2.15	1.0E-102	T70393.1	EST_HUMAN	y413407.t1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:67021 5'
9332	21846	34786	3.3	1.0E-102	AU124628.1	EST_HUMAN	y413407.t1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:67021 5'
10284	22778		0.54	1.0E-102	AF153715.1	NT	AU124628 NT2RM4 Homo sapiens cDNA clone NT2RM4000309 5'
10365	22859	35851	3.54	1.0E-102	A805037.1	EST_HUMAN	Homo sapiens phospholipid scramblase 1 gene, exon 1 and 5' flanking region
10365	22859	35852	3.54	1.0E-102	A805037.1	EST_HUMAN	RC-BT074-280469-014 BT074 Homo sapiens cDNA
10422	22816	35816	1.58	1.0E-102	AA970788.1	EST_HUMAN	RC-BT074-280469-014 BT074 Homo sapiens cDNA
10949	23464	36488	1.83	1.0E-102	BE887488.1	EST_HUMAN	on57h04.s1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1580823 3' similar to
10952	23467	36490	6.28	1.0E-102	4507822	NT	SW:CAV2_HUMAN P51636 CAVEOLIN-2. [1];
10952	23467	36491	6.28	1.0E-102	4507822	NT	601439392F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924188 5'
11200	23705	36756	1.54	1.0E-102	AA868675.1	EST_HUMAN	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
11282	23735	36780	3.6	1.0E-102	BF356243.1	EST_HUMAN	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
11555	24003	37078	3.68	1.0E-102	U413802.1	NT	ak48h10.s1 Scores_NHT_Homo sapiens cDNA clone IMAGE:1408347 3'
11689	24105		8.01	1.0E-102	AL163280.2	NT	RC8-E10072-150800-011-F01 E10072 Homo sapiens cDNA
12281	24471	30831	6.87	1.0E-102	AW300882.1	EST_HUMAN	Human chromosome 16 creatine transporter (SLC6A8) and (CDM) paralogous genes, complete cds
12588	24681		1.79	1.0E-102	J05235.1	NT	Homo sapiens chromosome 21 segment HS21C080
73	12751	25228	2.49	1.0E-103	BE908156.1	EST_HUMAN	x407c12.x1 NCI_CGAP_Co20 Homo sapiens cDNA clone IMAGE:2868038 3'
73	12751	25230	2.49	1.0E-103	BE908156.1	EST_HUMAN	Human gamma-glutamyl transpeptidase mRNA, complete cds
104	12780	25282	8.28	1.0E-103	D87078.2	NT	601500405F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3802305 5'
222	12883	26368	2.74	1.0E-103	5453793	NT	601500405F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3802305 5'
1017	13627	26140	0.82	1.0E-103	AJ278348.1	NT	Homo sapiens mRNA for KIAA0235 protein, partial cds
1286	13851	26406	10.5	1.0E-103	BE877541.1	EST_HUMAN	Homo sapiens nucleolar protein (KKE/D repeat) (NOP56) mRNA
1640	14232	26768	2.28	1.0E-103	AF012872.1	NT	Homo sapiens mRNA for pregnancy-associated plasma protein-E (PAPPE gene)
2018	14600	27163	1.43	1.0E-103	4502428	NT	601483388F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3887878 5'
2018	14600	27164	1.43	1.0E-103	4502428	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
2343	14914	27488	1	1.0E-103	AU134691.1	EST_HUMAN	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
2494	15058	27632	1.88	1.0E-103	AF080588.1	NT	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2631	15192	27762	1.54	1.0E-103	BF528379.1	EST_HUMAN	802041882F1 NCI_CGAP_Bm87 Homo sapiens cDNA clone IMAGE:4179429 5'
2631	15192	27763	1.54	1.0E-103	BF528379.1	EST_HUMAN	802041882F1 NCI_CGAP_Bm87 Homo sapiens cDNA clone IMAGE:4179429 5'
3105	15720		2.9	1.0E-103	BE744722.1	EST_HUMAN	601573113F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3894315 5'
3426	16034	28514	3.71	1.0E-103	AW288245.1	EST_HUMAN	U1H-BW0-4pA-11-Q-U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:2733165 3'
3487	16092	28564	1.19	1.0E-103	AB040892.1	NT	Homo sapiens mRNA for KIAA1459 protein, partial cds
3618	16418		6.77	1.0E-103	AF023861.1	NT	Macaca mulatta cyclophilin A mRNA, complete cds
3661	18459	28823	1.17	1.0E-103	AA485683.1	EST_HUMAN	ab10412.s1 Stratiogene lung (8037210) Homo sapiens cDNA clone IMAGE:340407 3' similar to contains element LTR10 repetitive element;
4075	16671	29132	3.62	1.0E-103	T23883.1	EST_HUMAN	seq340 b4HB3MA-Cat109+10-Bio Homo sapiens cDNA clone b4HB3MA-Cat109+10-Bio-7 3'
4946	17521	29863	0.68	1.0E-103	BE900203.1	EST_HUMAN	601673135F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3955953 5'
6091	18707	31455	0.73	1.0E-103	BF569527.1	EST_HUMAN	602168023F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310573 5'
6097	18713	31463	1.8	1.0E-103	AF179895.1	NT	Homo sapiens septin 2 (SEP2) mRNA, partial cds
6413	19016	31788	0.71	1.0E-103	11435053	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
6413	19016	31789	0.71	1.0E-103	11435053	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
6587	19184	31985	0.78	1.0E-103	AW954568.1	EST_HUMAN	EST368836 IMAGE sequences, MAGC Homo sapiens cDNA
6587	19184	31986	0.78	1.0E-103	AW954568.1	EST_HUMAN	EST368836 IMAGE sequences, MAGC Homo sapiens cDNA
6707	24767	32108	1.18	1.0E-103	AA781442.1	EST_HUMAN	aj26e03.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391452 3'
6743	19337	32142	0.86	1.0E-103	AF053490.1	NT	Homo sapiens glycine receptor alpha 2 subunit (GLRA2) gene, exon 4
6819	19409	32227	1.89	1.0E-103	AI500071.1	EST_HUMAN	tm58b05.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR-Q13769
6819	19409	32228	1.89	1.0E-103	AI500071.1	EST_HUMAN	Q13769 ANONYMOUS.;
6833	18041	30484	1.67	1.0E-103	5032282	NT	tm58b05.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR-Q13769
6933	18041	30485	1.67	1.0E-103	5032282	NT	Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS270, DXS272 (CMD), transcript variant Dp427m, mRNA
7047	18067	30457	1.07	1.0E-103	11431100	NT	Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS270, DXS272 (CMD), transcript variant Dp427m, mRNA
7101	19071	32510	1.13	1.0E-103	AJ289880.1	NT	Homo sapiens ribosomal protein L3-like (RPL3L), mRNA
7278	18808	32665	1.34	1.0E-103	AW985778.1	EST_HUMAN	Homo sapiens KIAA0851 gene (partial), X13 gene and LZTFL1 gene
7372	18898	32759	3.38	1.0E-103	BE748158.1	EST_HUMAN	EST377849 IMAGE sequences, MAGI Homo sapiens cDNA
7749	20257	33152	4.44	1.0E-103	AI500071.1	EST_HUMAN	601571537F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3638545 5'
							tm58b05.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR-Q13769

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7749	20257	33153	4.44	1.0E-103	AI590071.1	EST_HUMAN	hm58605.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13789
8556	21095	34015	1.14	1.0E-103	AU140344.1	EST_HUMAN	Q13789 ANONYMOUS.;
8558	21095	34016	1.14	1.0E-103	AU140344.1	EST_HUMAN	AU140344 PLACE2 Homo sapiens cDNA clone PLACE2000374 5'
8637	21176	34095	1.13	1.0E-103	BF109244.1	EST_HUMAN	AU140344 PLACE2 Homo sapiens cDNA clone PLACE2000374 5'
9036	21573	34502	2.82	1.0E-103	6005921	NT	780003.x1 Scores_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3525684 3' similar to SW:PTNF_HUMAN Q16825 PROTEIN-TYROSINE PHOSPHATASE D1;
9038	21573	34503	2.82	1.0E-103	6005921	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
9075	21612	34544	1.08	1.0E-103	AA581088.1	EST_HUMAN	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
9117	21653	34594	1.29	1.0E-103	AA774980.1	EST_HUMAN	nd13002.s1 NCL CGAP_Ov1 Homo sapiens cDNA clone IMAGE:800162 3' similar to gb:L02426 26S
9870	22465	35449	1.55	1.0E-103	Z37978.1	NT	PROTEASE SUBUNIT 4 (HUMAN);
10011	22508	35497	1.64	1.0E-103	AW963678.1	EST_HUMAN	ae84d12.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:970871 3' similar to gb:X03747_cds1 SODIUMPOTASSIUM-TRANSPORTING ATPASE BETA-1 (HUMAN);
10137	22632	35621	9.08	1.0E-103	AI878858.1	EST_HUMAN	H.sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
10521	23059	36069	2.78	1.0E-103	BE549706.1	EST_HUMAN	EST376749 IMAGE resequences, MAGH Homo sapiens cDNA
10612	23145	36158	3.46	1.0E-103	A1792759.1	EST_HUMAN	au51g04.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2518328 5' similar to TR:Q15046 Q15046 KIAA0338;
10713	23241	36257	2.21	1.0E-103	11424061	NT	7641603.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3230813 3' similar to gb:H69043 MAJOR HISTOCOMPATIBILITY COMPLEX ENHANCER-BINDING PROTEIN (HUMAN);
10724	23251	36266	3.68	1.0E-103	AF149773.1	NT	cd02808.y5 NCL CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1522283 5' similar to TR:Q62084 Q62084 PHOSPHOLIPASE C NEIGHBORING;
10724	23251	36267	3.68	1.0E-103	AF149773.1	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), mRNA
11253	23763	36839	2.51	1.0E-103	AU136263.1	EST_HUMAN	Homo sapiens AXL receptor tyrosine kinase (AXL), mRNA
11320	23018	36027	5.36	1.0E-103	L43610.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
11560	24033	37103	4.36	1.0E-103	BE844611.1	EST_HUMAN	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
11684	24101		2.23	1.0E-103	AF224689.1	NT	AU136263 PLACE1 Homo sapiens cDNA clone PLACE1003923 5'
11717	24126		1.91	1.0E-103	11526281	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
11916	24254	31010	2.98	1.0E-103	AB011398.1	NT	7e68a10.x1 Scores_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3267610 3' similar to contains MER29.13 MER29 repetitive element.;
254	12814	25398	4.81	1.0E-104	AL037549.3	EST_HUMAN	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
254	12914	25399	4.81	1.0E-104	AL037549.3	EST_HUMAN	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
							Homo sapiens gene for AF-6, complete cds
							DKFZp564H1072_1 564 (synonym: hfr2) Homo sapiens cDNA clone DKFZp564H1072 5'
							DKFZp564H1072_1 564 (synonym: hfr2) Homo sapiens cDNA clone DKFZp564H1072 5'

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1832	14516	27072	2.08	1.0E-104	4502428	NT	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
2235	14810	27382	2.22	1.0E-104	AA132875.1	EST_HUMAN	z02206.s1 Stratiene cdon (#637204) Homo sapiens cDNA clone IMAGE:587626 3' similar to
2245	14819	27394	1.47	1.0E-104	BE744828.1	EST_HUMAN	gb:Z14116_mn1 CD59 GLYCOPROTEIN PRECURSOR (HUMAN);
2407	14875	27548	0.89	1.0E-104	BF334221.1	EST_HUMAN	601577460F1 NIH_MGC 9 Homo sapiens cDNA clone IMAGE:3928438 5'
2407	14975	27549	0.89	1.0E-104	BF334221.1	EST_HUMAN	RC1-CT0249-110900-214-F12 CT0249 Homo sapiens cDNA
2481	15047	27616	1.28	1.0E-104	5031570	NT	RC1-CT0249-110900-214-F12 CT0249 Homo sapiens cDNA
2896	15513	27983	8.17	1.0E-104	M94871.1	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2941	15557		3.21	1.0E-104	Y11151.1	NT	Human lymphocytic antigen CD58/MEIM43 mRNA, complete cds
3438	16046		1.77	1.0E-104	AA319438.1	EST_HUMAN	H. sapiens gene encoding phenylpyruvate tautomerase II
3681	16263	28735	0.63	1.0E-104	AB033102.1	NT	EST121658 Adrenal gland tumor Homo sapiens cDNA 5' end
3681	16283	28736	0.63	1.0E-104	AB033102.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
4015	16813	29086	1.2	1.0E-104	AB032988.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
4210	16769	29248	0.62	1.0E-104	F11745.1	EST_HUMAN	Homo sapiens mRNA for KIAA1172 protein, partial cds
4468	17052	29498	0.67	1.0E-104	X02761.1	NT	HSC31A071 normalized infant brain cDNA Homo sapiens cDNA clone c-31807
4715	17286	29740	1.28	1.0E-104	AF231920.1	NT	Human mRNA for fibronectin (FN precursor)
4715	17286	29741	1.28	1.0E-104	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
5330	17891	30305	1.84	1.0E-104	4502452	NT	Homo sapiens chromosome 21 unknown mRNA
6095	18711	31459	1.18	1.0E-104	U43379.1	NT	Homo sapiens apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
6095	18711	31460	1.18	1.0E-104	U43379.1	NT	Human Down Syndrome region of chromosome 21 DNA
6139	18753	31511	0.98	1.0E-104	AB017332.1	NT	Human Down Syndrome region of chromosome 21 DNA
6593	19190	31893	8.25	1.0E-104	A1768797.1	EST_HUMAN	Homo sapiens cDNA clone IMAGE:2401727 3' similar to TR:Q14145 Q14145
6593	19180	31894	8.25	1.0E-104	A1768797.1	EST_HUMAN	wf03b12.x1 NC1_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2401727 3' similar to TR:Q14145 Q14145
6756	19349	32158	1.07	1.0E-104	7706512	NT	KIAA0132 PROTEIN, contains element LTR7 repetitive element
6895	19629	32465	1.48	1.0E-104	BE314182.1	EST_HUMAN	Homo sapiens PDZ domain-containing guanine nucleotide exchange factor 1 (LOC51735), mRNA
6895	19629	32468	1.48	1.0E-104	BE314182.1	EST_HUMAN	601150451F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503220 5'
7276	19804	32863	2.22	1.0E-104	11425572	NT	601150451F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503220 5'
8533	21072	33982	0.71	1.0E-104	BF509244.1	EST_HUMAN	(Homo sapiens adipsin-related protein complex 2, beta 1 subunit (AP2B1), mRNA
9094	21630	34568	2.59	1.0E-104	BF448230.1	EST_HUMAN	U1-H-B14-aw-b-08-0-U1.s1 NC1_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3088176 3'
9187	21704	34646	0.6	1.0E-104	AA682308.1	EST_HUMAN	mad16g11.x1 NC1_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3385949 3'
9208	21725		1.82	1.0E-104	174219.1	EST_HUMAN	z988505.s1 Soares fetal liver spleen_1NFLS S1 Homo sapiens cDNA clone IMAGE:462897 3'
9238	21764	34710	4.74	1.0E-104	AF091395.1	NT	ye3302.r1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:22440 5'
						NT	Homo sapiens Trio isoform mRNA, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9238	21764	34711	4.74	1.0E-104	AF091395.1	NT	Homo sapiens Tiro isoform mRNA, complete cds
9362	20301	33201	4.6	1.0E-104	BF352841.1	EST_HUMAN	IL3-HT0619-080900-249-F07 HT0619 Homo sapiens cDNA
9362	20301	33202	4.6	1.0E-104	BF352841.1	EST_HUMAN	IL3-HT0619-080900-249-F07 HT0619 Homo sapiens cDNA
9668	22167	35142	0.69	1.0E-104	AW103948.1	EST_HUMAN	xd76d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2803523 3' similar to TRQ24116
9668	22167	35143	0.69	1.0E-104	AW103948.1	EST_HUMAN	xd76d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2803523 3' similar to TRQ24116
9658	22355	35338	0.54	1.0E-104	AF113514.1	NT	Homo sapiens histone acetyltransferase MORF mRNA, complete cds
10005	22500	35490	3.86	1.0E-104	BE791713.1	EST_HUMAN	601581503F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3935977 5'
10005	22500	35491	3.86	1.0E-104	BE791713.1	EST_HUMAN	601581503F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3935977 5'
10289	22793	36783	1.05	1.0E-104	AV728070.1	EST_HUMAN	AV728070 HTC Homo sapiens cDNA clone HTCBYA07 5'
10338	22832	35827	4.98	1.0E-104	AU130765.1	EST_HUMAN	AU130765 NT2RP3 Homo sapiens cDNA clone NT2RP3001398 5'
10445	22839	35949	3.94	1.0E-104	U68535.1	NT	Human beta4-integrin (ITGB4) gene, exons 19,20,21,22,23,24 and 25
10457	22951		1.04	1.0E-104	11427757	NT	Homo sapiens KIAA0849 gene product (KIAA0849), mRNA
11178	23683	36728	2.44	1.0E-104	BE720191.1	EST_HUMAN	RCO-HT0885-310700-021-b09 HT0885 Homo sapiens cDNA
11178	23683	36728	2.44	1.0E-104	BE720191.1	EST_HUMAN	RCO-HT0885-310700-021-b09 HT0885 Homo sapiens cDNA
11208	23712	36768	5.34	1.0E-104	BF684288.1	EST_HUMAN	602141215F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4302507 5'
12538	24848		2.58	1.0E-104	BE393892.1	EST_HUMAN	601312181F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3659678 5'
300	15384	26445	2.78	1.0E-105	4502189	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistin-II, Alzheimer disease) (APP), mRNA
450	12679	25135	15.84	1.0E-105	4505150	NT	Homo sapiens Mada1 (mouse) homolog (MEIS1) mRNA
620	13247	25720	5.78	1.0E-105	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
620	13247	25721	5.78	1.0E-105	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
1719	14311		1.84	1.0E-105	AB020981.1	NT	Homo sapiens mRNA for cyclin B2, complete cds
1859	14447	27004	1.35	1.0E-105	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
1970	14554	27110	1.24	1.0E-105	D50918.1	NT	Human mRNA for KIAA0128 gene, partial cds
2231	14906	27378	1.36	1.0E-105	AA318369.1	EST_HUMAN	EST20069 Spleen I Homo sapiens cDNA 5' end similar to autoimmune antigen Ku, p70/p80 subunit
2747	15302		1.43	1.0E-105	AA594808.1	EST_HUMAN	no10d05.s1 NCI CGAP Phel1 Homo sapiens cDNA clone IMAGE:1109285 3'
3039	15655		3.35	1.0E-105	AJ229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
3394	16002	28482	0.72	1.0E-105	7304822	NT	Homo sapiens bromodomain adjacent to zinc finger domain, ZB (BAZ2B), mRNA
3394	16002	28483	0.72	1.0E-105	7304822	NT	Homo sapiens bromodomain adjacent to zinc finger domain, ZB (BAZ2B), mRNA
4173	16784	29212	2.65	1.0E-105	AW981688.1	EST_HUMAN	EST1373761 IMAGE resequencing, MAGG Homo sapiens cDNA
4853	17431	28881	0.65	1.0E-105	BE868881.1	EST_HUMAN	601445623F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3650158 5'
4853	17431	28882	0.65	1.0E-105	BE868881.1	EST_HUMAN	601445623F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3650158 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4874	17449	26900	1.08	1.0E-105	AA680335.1	EST_HUMAN	344g02.s1 Scores fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:433682 3'
5073	17646		4.94	1.0E-105	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
5533	18165	30579	0.97	1.0E-105	AF016704.1	NT	Homo sapiens EG-AP ubiquitin-protein ligase (UBE3A) gene, exon 2
5504	18224		1.12	1.0E-105	11420134	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
6865	19483	32303	1.68	1.0E-105	BF314302.1	EST_HUMAN	601601028F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4130334 5'
6865	19483	32304	1.68	1.0E-105	BF314302.1	EST_HUMAN	601601028F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4130334 5'
7059	18077	30430	3.65	1.0E-105	11418188	NT	Homo sapiens GTPase activating protein-like (GAPL), mRNA
7059	18077	30431	3.65	1.0E-105	11418188	NT	Homo sapiens GTPase activating protein-like (GAPL), mRNA
7328	18655	32718	1.09	1.0E-105	BE902618.1	EST_HUMAN	601077278F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3960019 5'
7800	20343	33252	0.87	1.0E-105	X12558.1	NT	Human mRNA for dbl proto-oncogene
7871	20513	33420	5.88	1.0E-105	Y05087.1	EST_HUMAN	EST02875 Fetal brain, Striatum (cat#836206) Homo sapiens cDNA clone HFB032
8337	20878	33788	1.43	1.0E-105	AW007194.1	EST_HUMAN	ws50c10.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2500628 3' similar to SW:ACSA_PENCH P36333 ACETYL-COENZYME A SYNTHETASE ;
8858	21397	34320	0.75	1.0E-105	AW940817.1	EST_HUMAN	RC1-CN0008-070100-011-e05 CN0008 Homo sapiens cDNA
8880	21518	34444	2.92	1.0E-105	AW016878.1	EST_HUMAN	UI-H-B10p-abl-b-12-Q-UI.s1 NCI_CGAP_Sub2 Homo sapiens cDNA clone IMAGE:2711782 3'
9131	21688	34608	0.87	1.0E-105	AW882372.1	EST_HUMAN	QV2-OT0062-140300-083-d09 OT0062 Homo sapiens cDNA
9131	21688	34607	0.87	1.0E-105	AW882372.1	EST_HUMAN	QV2-OT0062-140300-083-d09 OT0062 Homo sapiens cDNA
9487	21844	34881	1.07	1.0E-105	BE867783.1	EST_HUMAN	601443755F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847884 5'
9487	21844	34882	1.07	1.0E-105	BE867783.1	EST_HUMAN	601443755F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847884 5'
10812	23334	36347	6.07	1.0E-105	AF254822.1	NT	Homo sapiens SMARCA4 isoform (SMARCA4) gene, complete cds, alternatively spliced
11109	23818	36660	2.15	1.0E-105	D83548.1	NT	Homo sapiens COL4A8 gene for $\alpha 1(IV)$ collagen, exon 31
11161	23688	36713	2.07	1.0E-105	7705938	NT	Homo sapiens Ran binding protein 11 (LOC51194), mRNA
11457	23907	36874	2.58	1.0E-105	AW027554.1	EST_HUMAN	wv74d07.x1 Scores thymus_NHFT Homo sapiens cDNA clone IMAGE:2635301 3' similar to TR:P87892 P87892 PROTEASE ;
11524	23972	37042	1.82	1.0E-105	BF430821.1	EST_HUMAN	7a18c10.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3574291 3' similar to TR:P97880 P97880 RIN1 ;
13	12692	25148	2.29	1.0E-106	AI804463.1	EST_HUMAN	IL-BT057-281198-001 BT057 Homo sapiens cDNA
162	12825		1.55	1.0E-106	AW503208.1	EST_HUMAN	UI-HF-BN0-akt-g-07-Q-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078348 5'
219	12880	25366	1.75	1.0E-106	AI865065.1	EST_HUMAN	tg78c01.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2215008 3'
587	13108	25678	1.82	1.0E-106	AW865558.1	EST_HUMAN	EST37829 MAGE resequences, MAGI Homo sapiens cDNA
633	13258	25733	2.3	1.0E-106	J00148.1	NT	Human dihydrofolate reductase pseudogene (psi-hd1)
634	13258	25733	3.03	1.0E-106	J00148.1	NT	Human dihydrofolate reductase pseudogene (psi-hd1)
1572	14165	26868	1.57	1.0E-106	AF145712.1	NT	Homo sapiens soluble neuropilin-1 mRNA, complete cds
1738	14328	26873	4.72	1.0E-106	U48724.1	NT	Human epidermal growth factor receptor (EGFR) precursor-mRNA, exon 4, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1757	14347	26892	0.89	1.0E-108	U04510.1	NT	Homo sapiens type IV collagen alpha 5 chain (COL4A5) gene, exon 41
1839	14427	26978	5.32	1.0E-108	AA527446.1	EST_HUMAN	ng41cd05.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element LTR3 repetitive element;
1839	14427	26979	5.32	1.0E-108	AA527446.1	EST_HUMAN	ng41cd05.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element LTR3 repetitive element;
2167	14744	27313	2.48	1.0E-108	BE144286.1	EST_HUMAN	MR0-HT0165-140200-008-d10 HT0165 Homo sapiens cDNA
2356	14927	27501	3.35	1.0E-108	4504184	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2636	15186	27769	1.49	1.0E-108	BE260201.1	EST_HUMAN	601149783F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3602461 5'
2788	15339	27910	6.88	1.0E-108	AU276528.1	EST_HUMAN	q78h10.x1 Soares_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:1878307 3'
2852	14071	26909	1.52	1.0E-108	4504184	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2852	14071	26910	1.52	1.0E-108	4504184	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2889	15516	27985	0.98	1.0E-108	BE394286.1	EST_HUMAN	601272675F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3613318 5'
2888	15593	28063	6.37	1.0E-108	AB037747.1	NT	Homo sapiens mRNA for KIAA1328 protein, partial cds
2988	15593	28064	6.37	1.0E-108	AB037747.1	NT	Homo sapiens mRNA for KIAA1328 protein, partial cds
3214	15826	28303	2.04	1.0E-108	8922865	NT	Homo sapiens hypothetical protein FLJ11273 (FLJ11273), mRNA
3214	15826	28304	2.04	1.0E-108	8922865	NT	Homo sapiens hypothetical protein FLJ11273 (FLJ11273), mRNA
3420	16026	28509	0.72	1.0E-108	AB008681.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
3488	16093	28595	1.14	1.0E-108	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
3488	16093	28596	1.14	1.0E-108	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
4111	16705	29158	9.08	1.0E-108	AW974650.1	EST_HUMAN	EST388875 MAGC resequences, MAGN Homo sapiens cDNA
4111	16705	29159	9.08	1.0E-108	AW974650.1	EST_HUMAN	EST388875 MAGC resequences, MAGN Homo sapiens cDNA
4708	17288	29732	1.47	1.0E-108	BE144286.1	EST_HUMAN	MR0-HT0165-140200-008-d10 HT0165 Homo sapiens cDNA
5438	17893	30399	8.5	1.0E-108	S67479.1	NT	(GC*IS)-vitamin D-binding protein/group specific component [human, peripheral blood leukocytes, Genomic, 2128 nt, segment 5 of 9]
5572	18203	30683	2.76	1.0E-108	AA781155.1	EST_HUMAN	q24409.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391225 3' similar to gb.X12433 PROTEIN
6017	18636	31375	0.87	1.0E-108	AU130113.1	EST_HUMAN	PHPS1-2 (HUMAN);
6017	18636	31376	0.87	1.0E-108	AU130113.1	EST_HUMAN	AU130113 NT2RP3 Homo sapiens cDNA clone NT2RP3000274 5'
6145	18759	31517	0.82	1.0E-108	AU130113.1	EST_HUMAN	AU130113 NT2RP3 Homo sapiens cDNA clone NT2RP3000274 5'
6145	18759	31518	0.82	1.0E-108	AU143428.1	EST_HUMAN	AU143428 Y78AA1 Homo sapiens cDNA clone Y78AA1001912 5'
6250	18859	31631	13.05	1.0E-108	BF076574.1	EST_HUMAN	AU143428 Y78AA1 Homo sapiens cDNA clone Y78AA1001912 5'
6355	18900	31738	0.89	1.0E-108	BE897112.1	EST_HUMAN	602154012F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4285067 5'
6551	19149	31945	19.14	1.0E-108	11545913	NT	601439070F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924941 5'
6551	19149	31946	19.14	1.0E-108	11545913	NT	Homo sapiens xylotransferase II (X172), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7406	19831	32785	5.83	1.0E-106	AA683779.1	EST_HUMAN	ee72607.s1 Stragone schizo brain S11 Homo sapiens cDNA clone IMAGE:860732 3' similar to gb:X065873
7453	19877	32842	4.92	1.0E-106	11429617	NT	KINESIN HEAVY CHAIN (HUMAN);
7514	20035	32901	1.23	1.0E-106	BE292722.1	EST_HUMAN	Homo sapiens XPMC2 protein (LOC57108), mRNA
7606	20119	32965	8.75	1.0E-106	11425503	NT	601105738F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2886345 5'
7606	20119	32966	8.75	1.0E-106	11425503	NT	Homo sapiens sorting nexin 11 (SNX11), mRNA
7769	20277	33176	0.72	1.0E-106	AW163047.1	EST_HUMAN	Homo sapiens sorting nexin 11 (SNX11), mRNA
7826	20468	33376	5.97	1.0E-106	BE741408.1	EST_HUMAN	eu01105.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783649 5' similar to TR:O75834
7826	20468	33377	5.97	1.0E-106	BE741408.1	EST_HUMAN	O75834 CULLIN-4A;
8115	20658	33565	13.85	1.0E-106	AI523068.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
8564	21103	34022	0.74	1.0E-106	BE387850.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
8564	21103	34023	0.74	1.0E-106	BE387850.1	EST_HUMAN	ar68a07.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2127732 3' similar to gb:X062233
8640	21179	34099	3.9	1.0E-106	AI654123.1	EST_HUMAN	CALGRANULIN B (HUMAN);
8645	21184	34103	0.54	1.0E-106	AI691109.1	EST_HUMAN	601282717F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604493 5'
8682	21520	34448	0.56	1.0E-106	AW838831.1	EST_HUMAN	601282717F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604493 5'
9074	21611	34542	2	1.0E-106	AA825307.1	EST_HUMAN	ly62a05.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2283632 3' similar to SW:ICAG_HUMAN
9074	21611	34543	2	1.0E-106	AA825307.1	EST_HUMAN	Q05084 69 KD ISLET CELL AUTOANTIGEN;
9210	21727	34670	2.03	1.0E-106	AI750447.1	EST_HUMAN	wu38c03.x1 Soares_Deckgraeffe_cdon_NHCD Homo sapiens cDNA clone IMAGE:2522308 3' similar to TR:O70273 O70273 ETS HOMOLOGOUS FACTOR;
9350	21864	34814	1.46	1.0E-106	AI785599.1	EST_HUMAN	CMA-LT0059-150200-088-e08 LT0059 Homo sapiens cDNA
9350	21864	34815	1.46	1.0E-106	AI785599.1	EST_HUMAN	cc67a08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1354790 3'
9913	22409	35365	1.35	1.0E-106	BE386234.1	EST_HUMAN	cc67a08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1354790 3'
9996	22491	35479	1.47	1.0E-106	BF027310.1	EST_HUMAN	cc67a08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1354790 3'
9996	22491	35480	1.47	1.0E-106	BF027310.1	EST_HUMAN	cc67a08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1354790 3'
10139	22834	35624	8.16	1.0E-106	AA604417.1	EST_HUMAN	601671674F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954403 5'
10139	22834	35625	8.16	1.0E-106	AA604417.1	EST_HUMAN	np57b10.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1130385 3'
10185	22880	35672	1.56	1.0E-106	AW363299.1	EST_HUMAN	np57b10.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1130385 3'
10190	22885	35677	0.77	1.0E-106	11438432	NT	RCO-CT0318-201189-031-e11 CT0318 Homo sapiens cDNA
							Homo sapiens multimarin (MMRN), mRNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10180	22885	35878	0.77	1.0E-108	11438432	NT	Homo sapiens multimetric (MIMRN), mRNA
10358	22852	35848	0.45	1.0E-108	AL039886.1	EST_HUMAN	DKFZp434F0712_r1_434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434F0712.5
10472	22868	35976	3.31	1.0E-108	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C0002
10775	23289	36304	8.85	1.0E-108	BF032755.1	EST_HUMAN	601453461F1 NIH_MGC 68 Homo sapiens cDNA clone IMAGE:3857368.5
10775	23289	36305	8.85	1.0E-108	BF032755.1	EST_HUMAN	601453461F1 NIH_MGC 68 Homo sapiens cDNA clone IMAGE:3857368.5
10941	23457	36480	2.93	1.0E-108	J05200.1	NT	Human ryanodine receptor mRNA, complete cds
10941	23457	36481	2.93	1.0E-108	J05200.1	NT	Human ryanodine receptor mRNA, complete cds
11288	23739	36795	1.87	1.0E-108	BE257385.1	EST_HUMAN	601108219F1 NIH_MGC 16 Homo sapiens cDNA clone IMAGE:3349897.5
11418	23869	36829	1.83	1.0E-108	BE010882.1	EST_HUMAN	RC5-BND192-100500-021-B02 BN0192 Homo sapiens cDNA
11418	23869	36830	1.83	1.0E-108	BE010882.1	EST_HUMAN	RC5-BND192-100500-021-B02 BN0192 Homo sapiens cDNA
11762	24867		6.89	1.0E-108	AW410405.1	EST_HUMAN	fr05h11 x1 NIH_MGC 17 Homo sapiens cDNA clone IMAGE:2861644.5
11991	24301	30886	4.03	1.0E-108	BE894488.1	EST_HUMAN	601433087F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:3918524.5
11991	24301	30887	4.03	1.0E-108	BE894488.1	EST_HUMAN	601433087F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:3918524.5
12216	24439		3.44	1.0E-108	BE695005.1	EST_HUMAN	RC1-CT0249-090800-024-d05 CT0249 Homo sapiens cDNA
255	12815		2.78	1.0E-107	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
286	12842		1.25	1.0E-107	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
658	13281	25761	1.82	1.0E-107	AF155103.1	NT	Homo sapiens NY-REN-25 antigen mRNA, partial cds
848	13482	25970	1.45	1.0E-107	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
919	13532	26050	2.27	1.0E-107	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
1004	13615	26129	8.14	1.0E-107	AF154121.1	NT	Homo sapiens sodium-dependent high-affinity dicarboxylate transporter (NADC3) mRNA, complete cds
1321	13915	28437	1.33	1.0E-107	AB032253.1	NT	Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
1615	14208	26741	2.81	1.0E-107	BF087405.1	EST_HUMAN	QV2-HT0540-120900-358-d05 HT0540 Homo sapiens cDNA
1788	14378	26822	2.7	1.0E-107	AF138275.1	NT	Homo sapiens cathepsin Z precursor (CTS2) gene, exon 3
1880	14466	27023	0.89	1.0E-107	AB007922.2	NT	Homo sapiens mRNA for KIAA0453 protein, partial cds
1880	14468	27024	0.89	1.0E-107	AB007922.2	NT	Homo sapiens mRNA for KIAA0453 protein, partial cds
2249	14823	27399	1.17	1.0E-107	U13728.1	NT	Human dipeptidyl peptidase IV (CD26) gene, exon 20
2400	14968	27541	0.94	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-403 CN0031 Homo sapiens cDNA
2400	14968	27542	0.94	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-403 CN0031 Homo sapiens cDNA
2572	15135	27708	5.5	1.0E-107	BE732460.1	EST_HUMAN	601567619F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3842309.5
2572	15135	27707	5.5	1.0E-107	BE732460.1	EST_HUMAN	601567619F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3842309.5
3040	15658	28135	3.03	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-403 CN0031 Homo sapiens cDNA
3040	15658	28136	3.03	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-403 CN0031 Homo sapiens cDNA
3134	15748	28217	3.02	1.0E-107	5802097	NT	Homo sapiens SMT3 (suppressor of mit two 3, yeast) homolog 2 (SMT3H2), mRNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3868	16497	28659	4.68	1.0E-107	AF020671.1	NT	Homo sapiens myotubularin (MTM1) gene, exon 9
3972	16570	29039	1.89	1.0E-107	M19816.1	NT	Human apolipoprotein B-100 (apoB) gene, exon 10
3972	16570	29040	1.89	1.0E-107	M19816.1	NT	Human apolipoprotein B-100 (apoB) gene, exon 10
6025	18844	31388	4.74	1.0E-107	BE987489.1	EST_HUMAN	601442558F1 NIH_MGC 85 Homo sapiens cDNA clone IMAGE:3946494 5'
7389	18824	32788	1.4	1.0E-107	AW503913.1	EST_HUMAN	U1HF-BN0-af c-08-0-UI171 NIH_MGC 50 Homo sapiens cDNA clone IMAGE:3078310 5'
7389	18824	32789	1.4	1.0E-107	AW503913.1	EST_HUMAN	U1HF-BN0-af c-08-0-UI171 NIH_MGC 50 Homo sapiens cDNA clone IMAGE:3078310 5'
7536	20056	32630	1.28	1.0E-107	AI765078.1	EST_HUMAN	wh56h04.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2384791 3'
9309	21909	34858	0.88	1.0E-107	AU122469.1	EST_HUMAN	AU122469 MAMMA1 Homo sapiens cDNA clone MAMMA1002433 5'
10533	23070	36083	2.05	1.0E-107	BE168726.1	EST_HUMAN	QV1-HT0516-140300-107-c10 HT0516 Homo sapiens cDNA
10583	23118	36133	3.35	1.0E-107	AJ382850.1	EST_HUMAN	ig10d08.x1 NCI_CGAP_OLL1 Homo sapiens cDNA clone IMAGE:2108363 3' similar to SW:AACT_DICD1
10825	23346	36362	2.18	1.0E-107	L49141.1	NT	P06096 ALPHA-ACTININ 3, NON MUSCULAR;
10830	23360	36375	2.39	1.0E-107	BF666511.1	EST_HUMAN	Homo sapiens neuroendocrine-specific protein (NSP) gene, exon 4
11203	23708	36760	4.35	1.0E-107	BE540550.1	EST_HUMAN	602123083F1 NIH_MGC 58 Homo sapiens cDNA clone IMAGE:4281039 5'
11271	23009	36016	4.67	1.0E-107	11418701	NT	601068881F1 NIH_MGC 10 Homo sapiens cDNA clone IMAGE:3452828 5'
11271	23009	36017	4.67	1.0E-107	11418701	NT	Homo sapiens HSPC049 protein (HSPC049), mRNA
11577	24023	37082	3.77	1.0E-107	4507822	NT	Homo sapiens HSPC049 protein (HSPC049), mRNA
11830	25014		7.41	1.0E-107	AA001415.1	EST_HUMAN	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
189	12850		1.3	1.0E-108	AA341834.1	EST_HUMAN	2845601.s1 Source retina N2b4HR Homo sapiens cDNA clone IMAGE:361944 3' similar to contains THR.b1 THR repetitive element;
990	13602	26118	1.84	1.0E-108	BE286042.1	EST_HUMAN	EST47383 Fetal muscle Homo sapiens cDNA 5' end
1308	13902	26421	4.66	1.0E-108	Y18000.1	NT	601177018F1 NIH_MGC 17 Homo sapiens cDNA clone IMAGE:3532348 5'
2123	14701	27271	0.95	1.0E-108	BF028728.1	EST_HUMAN	Homo sapiens NF2 gene
2368	14939	27511	1.91	1.0E-108	AI686040.1	EST_HUMAN	601671914F1 NIH_MGC 20 Homo sapiens cDNA clone IMAGE:3954939 5'
2368	14939	27512	1.91	1.0E-108	AI686040.1	EST_HUMAN	891610.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2248938 3' similar to gb:M14219 BONE
							PROTEOGLYCAN II PRECURSOR (HUMAN);
							891610.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2248938 3' similar to gb:M14219 BONE
							PROTEOGLYCAN II PRECURSOR (HUMAN);
2472	15039	27607	7.63	1.0E-108	BE206694.1	EST_HUMAN	bb25b10.x1 NIH_MGC 14 Homo sapiens cDNA clone IMAGE:2863889 3' similar to gb:X53777 60S
3392	16000	28478	0.73	1.0E-108	AF032897.1	NT	RIBOSOMAL PROTEIN L23 (HUMAN); gb:J05277 Mouse hexokinase mRNA, complete cds (MOUSE);
3392	16000	28479	0.73	1.0E-108	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
							Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
4237	16825	29275	1.43	1.0E-108	AW69438.1	EST_HUMAN	H12a11.x1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2972060 3' similar to SW:38P1_MOUSE
							P65194 SH3-BINDING PROTEIN 3BP-1.;

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4624	17207	29658	1.92	1.0E-108	U72861.1	NT	Human hepatocyte nuclear factor 4-alpha gene, exon 2
4624	17207	29657	1.92	1.0E-108	U72861.1	NT	Human hepatocyte nuclear factor 4-alpha gene, exon 2
4926	17501	29949	2.08	1.0E-108	7861978	NT	Human sapiens KIAA0187 gene product (KIAA0187), mRNA
5044	17617	30082	0.93	1.0E-108	AW504790.1	EST_HUMAN	UIHF-BNO-ah-e-04-Q-UJL1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3080168 5'
5084	17657	30088	2.18	1.0E-108	AJ008005.1	NT	Homo sapiens PSN1 gene, alternative transcript
5318	17880	30268	0.81	1.0E-108	5031824	NT	Homo sapiens CCAAT-box-binding transcription factor (CBF2) mRNA
5670	18287	30777	1.2	1.0E-108	AW384094.1	EST_HUMAN	RCO-HT0372-241198-031-033 HT0372 Homo sapiens cDNA
5718	18344	30851	2.98	1.0E-108	BE889016.1	EST_HUMAN	60144492ZF1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3848880 5'
5718	18344	30852	2.98	1.0E-108	BE889016.1	EST_HUMAN	60144492ZF1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3848880 5'
6084	18701		0.83	1.0E-108	AJ012823.1	NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 20
6163	18768	31629	0.88	1.0E-108	BF334951.1	EST_HUMAN	PM4-CT0403-240700-001-c10 CT0403 Homo sapiens cDNA
6288	18898	31668	5.83	1.0E-108	AF284717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete cds
6288	18898	31667	5.83	1.0E-108	AF284717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete cds
6409	19012	31785	1.16	1.0E-108	AJ133289.1	NT	Homo sapiens caveolin-1/2 locus, Cav1g1, D7S522, genes CAV1 (exons 1, 2a, and 2b), CAV1 (exons 1 and 2)
6489	18768	31629	1.01	1.0E-108	BF334951.1	EST_HUMAN	PM4-CT0403-240700-001-c10 CT0403 Homo sapiens cDNA
6732	18328	32130	0.85	1.0E-108	AF016708.1	NT	Homo sapiens E8-AP ubiquitin-protein ligase (UBE3A) gene, exon 4
6732	18328	32131	0.85	1.0E-108	AF016708.1	NT	Homo sapiens E8-AP ubiquitin-protein ligase (UBE3A) gene, exon 4
7211	19742	32598	5.04	1.0E-108	11431857	NT	Homo sapiens G protein-coupled receptor, family C, group 5, member B (GPCR5B), mRNA
7465	18867	32852	3.44	1.0E-108	4759333	NT	Homo sapiens delta-6 fatty acid desaturase (FADS6) mRNA
7482	20015	32881	1.67	1.0E-108	BE252807.1	EST_HUMAN	601113471F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354084 5'
7516	20038	32803	1.08	1.0E-108	BF528912.1	EST_HUMAN	602043384F1 NCL_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4181037 5'
7516	20038	32804	1.08	1.0E-108	BF528912.1	EST_HUMAN	602043384F1 NCL_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4181037 5'
8008	20550		1.77	1.0E-108	AF083500.1	NT	Homo sapiens connective tissue growth factor-like protein precursor, mRNA, complete cds
8058	20600	33509	1.47	1.0E-108	AW408994.1	EST_HUMAN	UIHF-BMO-ads-e-12-Q-UJL1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3082878 5'
8058	20600	33510	1.47	1.0E-108	AW408994.1	EST_HUMAN	UIHF-BMO-ads-e-12-Q-UJL1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3082878 5'
8977	21515	34439	1.08	1.0E-108	AF203977.1	NT	Homo sapiens ETS-family transcription factor EHF (EHF) mRNA, complete cds
9015	21552	34480	0.52	1.0E-108	N44874.1	EST_HUMAN	y935h10.1 Scores melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:273283 5' similar to PIR-A45773 A45773 kelch protein, long form - fruit fly;
10501	22895	36004	0.49	1.0E-108	11428155	NT	Homo sapiens similar to high-mobility group (nonhistone chromosomal) protein 4 (H. sapiens) (LOC83446), mRNA
10547	20279	33178	1.87	1.0E-108	BE536227.1	EST_HUMAN	601058789F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3445381 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10707	18037	30497	2.08	1.0E-108	Y12480.1	NT	Homo sapiens mRNA for Gdgi-associated microtubule-binding protein (GMAP-210)
11151	23659	38703	4.23	1.0E-108	AW868185.1	EST_HUMAN	EST378258 MAGE resequences, MAGI Homo sapiens cDNA
11204	23709	38761	1.81	1.0E-108	AV708780.1	EST_HUMAN	AV708780 ADC Homo sapiens cDNA clone ADCAE03 5'
11204	23709	38782	1.81	1.0E-108	AV708780.1	EST_HUMAN	AV708780 ADC Homo sapiens cDNA clone ADCAE03 5'
11249	23779		2.91	1.0E-108	11441465	NT	Homo sapiens G protein-coupled receptor 48 (GPR48), mRNA
11305	23798	36857	1.72	1.0E-108	D63539.1	NT	Homo sapiens COL4A8 gene for $\alpha 1(V)$ collagen, exon 23
12005	24308	30691	5.17	1.0E-108	AK024447.1	NT	Homo sapiens mRNA for FLJ00037 protein, partial cds
12414	24567		7.58	1.0E-108	BF348358.1	EST_HUMAN	60218571F1 NCI CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4154287 5'
48	12725	25186	2.13	1.0E-109	AW803116.1	EST_HUMAN	IL2JIM0077-260400-078-D08 UM0077 Homo sapiens cDNA
69	12747	25225	3.04	1.0E-109	D98974.1	NT	Human mRNA for KIAA0220 gene, partial cds
235	12895	25378	4.41	1.0E-109	11422486	NT	Homo sapiens hypothetical protein FLJ11316 (FLJ11316), mRNA
248	12905	25386	2.89	1.0E-109	11438391	NT	Homo sapiens reticulocalbin 1, EF-hand calcium binding domain (RCN1), mRNA
482	13125	25610	4.89	1.0E-109	4507712	NT	Homo sapiens tetrapeptide repeat domain 2 (TTC2), mRNA
624	13251	25725	19.67	1.0E-109	AB023218.1	NT	Homo sapiens mRNA for KIAA0909 protein, partial cds
624	13251	25728	19.67	1.0E-109	AB023218.1	NT	Homo sapiens mRNA for KIAA0909 protein, partial cds
1050	13857	28168	0.72	1.0E-109	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
1244	13842	28358	24.19	1.0E-109	M28869.1	NT	Homo sapiens nuclear phosphoprotein B23 (NPM1), mRNA, complete cds
1245	13842	28359	15.92	1.0E-109	M28869.1	NT	Homo sapiens nuclear phosphoprotein B23 (NPM1), mRNA, complete cds
1589	14182	28714	0.98	1.0E-109	BE283673.1	EST_HUMAN	60118882F2 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2959636 5'
1589	14182	28715	0.98	1.0E-109	BE283673.1	EST_HUMAN	60118882F2 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2959638 5'
1915	14500	27055	3.28	1.0E-109	D13843.2	NT	Homo sapiens mRNA for KIAA0018 protein, partial cds
2283	14857	27434	1.19	1.0E-109	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
2292	14888	27441	2.08	1.0E-109	Y17123.1	NT	Homo sapiens SNF5/INI1 gene, exon 6
2652	15211	27783	2.86	1.0E-109	AI022328.1	EST_HUMAN	ow65a01.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1654538 3' similar to TR:002197 002197 CIRCULATING CATHODIC ANTIGEN. ;
2652	15211	27784	2.86	1.0E-109	AI022328.1	EST_HUMAN	ow65a01.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1654538 3' similar to TR:002197 002197 CIRCULATING CATHODIC ANTIGEN. ;
2653	15212	27785	2.01	1.0E-109	4504208	NT	Homo sapiens guanylate cyclase activator 1A (retina) (GUCY1A) mRNA
3094	15709	28180	1.68	1.0E-109	N85190.1	EST_HUMAN	J2818F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone J2818 5' similar to ZINC FINGER PROTEIN ZNF43
3435	16043	28524	1.34	1.0E-109	AW893192.1	EST_HUMAN	CM3-NN0009-180400-150-f10 NN0009 Homo sapiens cDNA
3435	16043	28525	1.34	1.0E-109	AW893192.1	EST_HUMAN	CM3-NN0009-180400-150-f10 NN0009 Homo sapiens cDNA
3589	16173	28655	0.9	1.0E-109	AF240698.1	NT	Homo sapiens retinal dehydrogenase homolog isoform-1 (RDH) mRNA, complete cds
3909	16508		0.93	1.0E-109	BE146144.1	EST_HUMAN	MRO-HT0208-110400-108-a04 HT0208 Homo sapiens cDNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4228	16816	28284	4.43	1.0E-109	A1855417.1	EST_HUMAN	ts98e08.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:22280330 3' similar to WP-F53A2.8
4493	17078	28528	2.7	1.0E-109	4504208	NT	CE16100:
4705	17287	29731	1.18	1.0E-109	7862083	NT	Homo sapiens guanylate cyclase activator 1A (retina) (GUCA1A) mRNA
5051	17824	30089	1.14	1.0E-109	R15400.1	EST_HUMAN	Homo sapiens KIAA0377 gene product (KIAA0377), mRNA
5465	18100	30418	0.78	1.0E-109	BF673718.1	EST_HUMAN	ya48e08.r1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:53057 5'
5516	18148	30560	2.6	1.0E-109	5174822	NT	602136446F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4272822 5'
5782	18417		1.24	1.0E-109	BE178356.1	EST_HUMAN	Homo sapiens placental protein 11 (serine proteinase) (P11) mRNA
6085	24756	31448	1.02	1.0E-109	BF378688.1	EST_HUMAN	RC1-HT0815-200400-022-d04 HT0815 Homo sapiens cDNA
6147	18417		1.3	1.0E-109	BE178356.1	EST_HUMAN	CM1-JT0038-060900-399-h07 UT0038 Homo sapiens cDNA
6491	18062	31875	0.8	1.0E-109	M23442.1	NT	RC1-HT0815-200400-022-d04 HT0815 Homo sapiens cDNA
6491	18062	31878	0.8	1.0E-109	M23442.1	NT	Human interleukin 4 (IL-4) gene, complete cds
7289	18817	32678	0.95	1.0E-109	AB046811.1	NT	Human interleukin 4 (IL-4) gene, complete cds
7568	20083	32959	4.08	1.0E-109	11432574	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
7568	20085	32861	5.94	1.0E-109	BF182707.1	EST_HUMAN	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
7568	20085	32862	5.94	1.0E-109	BF182707.1	EST_HUMAN	601809485F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040278 5'
8114	20655	33564	1.17	1.0E-109	AL049784.1	NT	601809485F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040278 5'
8227	20768	33887	1.27	1.0E-109	AW749130.1	EST_HUMAN	Novel human gene mapping to chromosome 13
8581	21130		2.65	1.0E-109	AA077498.1	EST_HUMAN	PM0-BT0340-091289-002-c05 BT0340 Homo sapiens cDNA
8689	21208	34125	14.1	1.0E-109	BE787540.1	EST_HUMAN	7B18H01 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B18H01
8689	21208	34128	14.1	1.0E-109	BE787540.1	EST_HUMAN	601479417F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3882124 5'
8908	21448	34368	0.57	1.0E-109	BE145872.1	EST_HUMAN	601479417F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3882124 5'
9163	21698	34842	1.82	1.0E-109	H84880.1	EST_HUMAN	IL0-HT0205-071189-142-g01 HT0205 Homo sapiens cDNA
9272	21798	34747	0.54	1.0E-109	BE397098.1	EST_HUMAN	ye09g08.r1 Soares retina N265HR Homo sapiens cDNA clone IMAGE:222110 5' similar to SP-A534801
9272	21798	34748	0.54	1.0E-109	BE397098.1	EST_HUMAN	A53491 BLUMETANIDE-SENSITIVE NA-K-Cl COTRANSPORTER - SP1NY:
9405	21914	34863	3.55	1.0E-109	F06804.1	EST_HUMAN	601289780F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620030 5'
10653	23165	36200	2.73	1.0E-109	BE540909.1	EST_HUMAN	601289780F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620030 5'
10653	23165	36201	2.73	1.0E-109	BE540909.1	EST_HUMAN	HSC1EC121 normalized infant brain cDNA Homo sapiens cDNA clone c-1ec12
10687	23217	36228	35.59	1.0E-109	BF684631.1	EST_HUMAN	601063303F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3449589 5'
10947	23368	36386	2	1.0E-109	7862279	NT	601063303F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3449589 5'
10947	23368	36387	2	1.0E-109	7862279	NT	602080724F2 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4245341 5'
11004	23518	36553	1.95	1.0E-109	AU121370.1	EST_HUMAN	Homo sapiens KIAA0744 gene product; histone deacetylase 7 (KIAA0744), mRNA
11248	23778	36835	2.84	1.0E-109	4502838	NT	Homo sapiens KIAA0744 gene product; histone deacetylase 7 (KIAA0744), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11285	23738	36784	6.81	1.0E-109	W16510.1	EST_HUMAN	zb08b12.1 Sources_fetal_lung_NIHRL19W Homo sapiens cDNA clone IMAGE:301439 5' similar to
12131	14868	27441	1.8	1.0E-108	Y17123.1	NT	PIR:S43989 S43989 p54-beta stress-activated protein kinases - rat;
12252	24463	30961	15.45	1.0E-108	AB011399.1	NT	Homo sapiens SNF5/INI1 gene, exon 6
3	12683	25139	1.19	1.0E-110	7549804	NT	Homo sapiens gene for AF-6, complete cds
40	12719	25179	4.61	1.0E-110	5803073	NT	Homo sapiens deiodinase, iodothyronine, type II (DIO2), transcript variant 2, mRNA
40	12719	25180	4.61	1.0E-110	5803073	NT	Homo sapiens leucine-zipper-like transcriptional regulator, 1 (LZTR1), mRNA
114	12683	25139	0.83	1.0E-110	7549804	NT	Homo sapiens leucine-zipper-like transcriptional regulator, 1 (LZTR1), mRNA
316	12970	25459	1	1.0E-110	D87291.1	NT	Homo sapiens deiodinase, iodothyronine, type II (DIO2), transcript variant 2, mRNA
553	13184	25682	0.93	1.0E-110	U84550.1	NT	Human mRNA for inward rectifier potassium channel, complete cds
1222	13822	26337	0.97	1.0E-110	5031620	NT	Human dystrobrein (DTN) gene, exon 20
1322	13916	26438	1.28	1.0E-110	AB032253.1	NT	Homo sapiens calcitonin receptor-like (CALCRL) mRNA
1865	14549	27105	1.48	1.0E-110	BE379477.1	EST_HUMAN	Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
2103	14882		1.65	1.0E-110	BF508896.1	EST_HUMAN	601237545F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609883 5'
2868	15494		0.85	1.0E-110	4503088	NT	UJH-B14-acc-b-05-0-UJH1 NC1_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085784 3'
3065	13916	26438	0.85	1.0E-110	AB032253.1	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
3123	15737		1.2	1.0E-110	U78027.1	NT	Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
3228	15940	28319	6.37	1.0E-110	11438041	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
3228	15940	28320	6.37	1.0E-110	11438041	NT	Homo sapiens pregnancy-zone protein (PZP), mRNA
4128	16720	29175	0.82	1.0E-110	BE018556.1	EST_HUMAN	Homo sapiens pregnancy-zone protein (PZP), mRNA
4281	16867	29314	1.08	1.0E-110	MT5918.1	NT	bb82a05.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048848 5' similar to TR:O60312 O60312
							KIAA0506 PROTEIN ;
							Human autoimmune antigen small nuclear ribonucleoprotein E pseudogene
4740	17321	29761	2.32	1.0E-110	AK017213.1	EST_HUMAN	ou32b10.x1 Sources_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1627983 3' similar to
4758	17339	29785	3.28	1.0E-110	AU117812.1	EST_HUMAN	SW.N121_RAT_P52581 NUCLEAR ENVELOPE PORE MEMBRANE PROTEIN POM 121 ;
5109	17681		1.8	1.0E-110	7682441	NT	AU117812 HEMBA1 Homo sapiens cDNA clone HEMBA1002241 5'
5498	18132	30540	2.16	1.0E-110	BE299406.1	EST_HUMAN	Homo sapiens KIAA1002 protein (KIAA1002), mRNA
5900	18522	31247	0.7	1.0E-110	BE621069.1	EST_HUMAN	60118710F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028538 5'
5917	18539	31284	6.81	1.0E-110	11418323	NT	60149367F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3895795 5'
5917	18539	31265	6.81	1.0E-110	11418323	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
6818	24771	32226	3.2	1.0E-110	M55112.1	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
7159	19891	32536	0.83	1.0E-110	U08888.1	NT	Human cystic fibrosis transmembrane conductance regulator (CFTR) gene, exon 7
7159	19891	32537	0.83	1.0E-110	U08888.1	NT	Human GS2 gene, exon 2
							Human GS2 gene, exon 2

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7364	19890	32753	0.74	1.0E-110	A1580289.1	EST_HUMAN	In12008.X1 NCI CGAP_Bm26 Homo sapiens cDNA clone IMAGE:2167407 3' similar to SW:ETV1_HUMAN
7454	19878	32843	11.28	1.0E-110	AV714278.1	EST_HUMAN	P50549 ETS TRANSLOCATION VARIANT 1;
7454	19878	32844	11.28	1.0E-110	AV714278.1	EST_HUMAN	AV714278 DCB Homo sapiens cDNA clone DCBCGE01 5'
7478	20000	32865	2.84	1.0E-110	AB020675.1	NT	AV714278 DCB Homo sapiens cDNA clone DCBCGE01 5'
7571	20088	32864	1.06	1.0E-110	AU137823.1	EST_HUMAN	Homo sapiens mRNA for KIAA0888 protein, partial cds
9258	21784	34737	0.54	1.0E-110	BE302594.1	EST_HUMAN	AU137823 PLACE1 Homo sapiens cDNA clone PLACE1007511 5'
9487	21897	34853	2.91	1.0E-110	AW838394.1	EST_HUMAN	ba6801.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2905561 5' similar to TR:O77258 O77258
10226	22721	35712	3.91	1.0E-110	11432732	NT	EG:11408.2 PROTEIN.;
10626	23158	36171	3.89	1.0E-110	Y12337.1	NT	QV2-L1T0053-020400-119-e04 LT0053 Homo sapiens cDNA
10848	23397	36384	3.87	1.0E-110	BE734357.1	EST_HUMAN	Homo sapiens galectinase 2 (GALK2), mRNA
10848	23387	36385	3.87	1.0E-110	BE734357.1	EST_HUMAN	H. sapiens mRNA for myotonic dystrophy protein kinase like protein
11317	23015	36024	3.28	1.0E-110	AA446528.1	EST_HUMAN	601565604F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3840433 5'
11719	24128		2.88	1.0E-110	BE897218.1	EST_HUMAN	601565604F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3840433 5'
11849	24209		11.88	1.0E-110	AW062258.1	EST_HUMAN	zw67g02.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:781298 5' similar to TR:G1145618
12082	24360		2.73	1.0E-110	AB011388.1	NT	G1145816 FKBP54;
12239	25027		8.39	1.0E-110	BF304546.1	EST_HUMAN	601439784F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924548 5'
12537	14682		1.43	1.0E-110	BF508898.1	EST_HUMAN	IL0-BT0163-040899-094-g10 BT0163 Homo sapiens cDNA
188	12847		28.49	1.0E-111	U43701.1	NT	Homo sapiens gene for AF-6, complete cds
210	12871	25357	0.94	1.0E-111	4758807	NT	PM3-NN1082-140900-008-f12 NN1082 Homo sapiens cDNA
784	13383		1.84	1.0E-111	BF035327.1	EST_HUMAN	U1H-B14-acc-b-05-0-U1.s1 NCI CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085784 3'
773	13392	25882	5.48	1.0E-111	8393092	NT	Human ribosomal protein L23a mRNA, complete cds
962	13573	26088	2.34	1.0E-111	M25142.1	NT	Homo sapiens ras GTPase activating protein-like (NGAP) mRNA
1870	14263	26797	2.34	1.0E-111	7862177	NT	601458531F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3882088 5'
4250	16838	28288	1.26	1.0E-111	7861689	NT	Homo sapiens cat eye syndrome critical region gene 1 (CECR1), mRNA
4423	17008	29451	4.84	1.0E-111	K02288.1	NT	Human cardiac alpha-myosin heavy chain (MYH6) gene, exons 32 to 34
5814	18438	31160	0.91	1.0E-111	BE887809.1	EST_HUMAN	Homo sapiens KIAA0555 gene product (KIAA0555), mRNA
6183	18793	31562	1.58	1.0E-111	A1344678.1	EST_HUMAN	Homo sapiens DKFZP434D158 protein (DKFZP434D158), mRNA
6781	19372	32186	1	1.0E-111	AL040782.1	EST_HUMAN	Homo sapiens DKFZP434D158 protein (DKFZP434D158), mRNA
6888	19632	32470	1.3	1.0E-111	AW294648.1	EST_HUMAN	Homo sapiens encephalin B (enkeB) gene, exon 4 and 3' flank and complete cds
7471	19893	32856	2.69	1.0E-111	BF386228.1	EST_HUMAN	601443680F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847855 5'
							601443680F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847855 5'
							qp08g12.x1 NCI CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1817674 3' similar to gb-M28893 RAS-
							RELATED PROTEIN RAL-A (HUMAN);
							DKFZp434C1815_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434C1815 5'
							U1H-BWO-acc-d-03-0-U1.s1 NCI CGAP_Sub8 Homo sapiens cDNA clone IMAGE:2728525 3'
							IL2-NT0101-280700-114-E03 NT0101 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7540	20060	32834	3.47	1.0E-111	A1761228.1	EST_HUMAN	wf88d01.x1 NCI CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2398465 3' similar to gb:J04813 CYTOCHROME P450 IIA5 (HUMAN);
7610	20123	33000	1.1	1.0E-111	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (naip) and survival motor neuron protein (smn) genes, complete cds
8038	20580	33486	0.77	1.0E-111	AA278868.1	EST_HUMAN	zsf9g03.f1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:703732 5' similar to TR:G1256410 G1256410 11-ZINC-FINGER TRANSCRIPTION FACTOR.;
8038	20580	33487	0.77	1.0E-111	AA278868.1	EST_HUMAN	zsf9g03.f1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:703732 5' similar to TR:G1256410 G1256410 11-ZINC-FINGER TRANSCRIPTION FACTOR.;
8128	20670	33580	0.89	1.0E-111	11431888	NT	Homo sapiens protein x 0001 (LOC51185), mRNA
8183	20724	33638	5.9	1.0E-111	U66533.1	NT	Human beta4-integrin (ITGB4) gene, exon 13
8613	21152	34068	0.82	1.0E-111	11420518	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic 2 (NFATC2), mRNA
8710	21249	34172	0.89	1.0E-111	AK024453.1	NT	Homo sapiens mRNA for FLJ00045 protein, partial cds
8743	21282		23.24	1.0E-111	BF214902.1	EST_HUMAN	601847132F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4078303 5'
8817	21358	34280	12.59	1.0E-111	X17033.1	NT	Human mRNA for integrin alpha-2 subunit
8817	21358	34281	12.59	1.0E-111	X17033.1	NT	Human mRNA for integrin alpha-2 subunit
9017	21554	34482	3.03	1.0E-111	AF091395.1	NT	Homo sapiens Trio isoform mRNA, complete cds
9241	21767	34716	0.58	1.0E-111	BF333210.1	EST_HUMAN	QV2-BT0817-270900-398-e08 BT0817 Homo sapiens cDNA
10056	22551	35546	2.03	1.0E-111	AA504160.1	EST_HUMAN	ae58g02.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825170 3' similar to gb:L08235 VACUOLAR ATP SYNTHASE CATALYTIC SUBUNIT A, UBIQUITOUS (HUMAN);
10082	22577		1.53	1.0E-111	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
10173	22688	35663	5.78	1.0E-111	AA131248.1	EST_HUMAN	zsf1101.f1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:503645 5'
10622	23441	36462	4.83	1.0E-111	U68159.1	NT	Human thrombopoietin receptor (MPL) gene, exons 1,2,3,4,5 and 6
11674	24083	37146	4.3	1.0E-111	11417801	NT	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
12234	24450	30954	2.23	1.0E-111	AV708482.1	EST_HUMAN	AV708482 ADC Homo sapiens cDNA clone ADCAO808 5'
12360	24818	30781	6.35	1.0E-111	W22582.1	EST_HUMAN	72C9 Human retina cDNA Tap5091-cleaved sublibrary Homo sapiens cDNA not directional
12507	18039	30498	1.31	1.0E-111	AB035356.1	NT	Homo sapiens mRNA for neuraxin I-alpha protein, complete cds
636	13259	25734	1.89	1.0E-112	4501854	NT	Homo sapiens acetyl-Coenzyme A carboxylase beta (ACACB), mRNA
638	13261	25736	5.94	1.0E-112	U29103.1	NT	Human steroidogenic acute regulatory protein (SIAR) gene, exon 5
638	13261	25737	5.94	1.0E-112	U29103.1	NT	Human steroidogenic acute regulatory protein (SIAR) gene, exon 5
660	13283	25763	1.42	1.0E-112	BF508039.1	EST_HUMAN	UI-H-B14-act-g-04-0-UI.s1 NCI CGAP Sub8 Homo sapiens cDNA clone IMAGE:3086023 3'
660	13283	25764	1.42	1.0E-112	BF508039.1	EST_HUMAN	UI-H-B14-act-g-04-0-UI.s1 NCI CGAP Sub8 Homo sapiens cDNA clone IMAGE:3086023 3'
1039	13649	26161	3.88	1.0E-112	AF157623.1	NT	Homo sapiens HTRA serine protease (PRSS11) gene, complete cds
1100	13705	26213	2	1.0E-112	P52742	SWISSPROT	ZINC FINGER PROTEIN 135
1722	14313	26853	4.44	1.0E-112	7662125	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1722	14313	26854	4.44	1.0E-112	7682125	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
1856	14444	27000	1.56	1.0E-112	AF248540.1	NT	Homo sapiens Intersectin 2 (SH3D1B) mRNA, complete cds
2550	15114	27684	1.81	1.0E-112	BE866859.1	EST_HUMAN	601442674F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3846838 5'
3114	15729		0.59	1.0E-112	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
3953	16551	28020	0.74	1.0E-112	BE076073.1	EST_HUMAN	MIR2-BT0590-090300-113-709 BT0590 Homo sapiens cDNA
4709	17281	28735	0.65	1.0E-112	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4894	17441	28891	5.1	1.0E-112	AB037632.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
4894	17441	28892	5.1	1.0E-112	AB037632.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
5848	18472	31186	38.42	1.0E-112	N46046.1	EST_HUMAN	Y63507.1 Scores melanocyte 2N6HIM Homo sapiens cDNA clone IMAGE:273228 5'
6227	18836	31609	1.36	1.0E-112	AF148773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
6294	18802	31672	0.85	1.0E-112	AW502437.1	EST_HUMAN	U1HF-BR0P-eps-g-08-0-UJ.1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3075658 5'
6294	18802	31673	0.85	1.0E-112	AW502437.1	EST_HUMAN	U1HF-BR0P-eps-g-08-0-UJ.1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3075658 5'
6397	19000	31778	1.2	1.0E-112	BE741688.1	EST_HUMAN	601594717F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3848557 5'
6747	19340	32146	0.68	1.0E-112	BE273103.1	EST_HUMAN	601142755F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3606608 5'
6747	19340	32147	0.68	1.0E-112	BE273103.1	EST_HUMAN	601142755F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3606608 5'
6828	19587	32416	1.36	1.0E-112	BF574235.1	EST_HUMAN	602131405F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4270921 5'
7375	19801	32764	1.57	1.0E-112	11416777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA
7375	19801	32765	1.57	1.0E-112	11416777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA
8134	20675	33587	1.93	1.0E-112	AU118051	EST_HUMAN	AUT118051 HEMBA1 Homo sapiens cDNA clone HEMBA1002773 5'
8887	21425	34350	2.49	1.0E-112	BE867635.1	EST_HUMAN	601443151F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847285 5'
8887	21425	34351	2.49	1.0E-112	BE867635.1	EST_HUMAN	601443151F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847285 5'
9807	22305	35289	2.06	1.0E-112	BF111413.1	EST_HUMAN	783907.x1 Scores NSF_FB_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3523020 3' similar to
10657	23189	36205	3.51	1.0E-112	AW863327.1	EST_HUMAN	TRQ9VW35 Q9VW35 C98743 PROTEIN ;
10743	23267	36283	1.85	1.0E-112	T93987.1	EST_HUMAN	MFR3-SN0009-100400-108-612 SN0009 Homo sapiens cDNA
10743	23267	36284	1.85	1.0E-112	T93987.1	EST_HUMAN	Y458410.a1 Scores fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:112243 3' similar to
10827	23348	36384	4.28	1.0E-112	AJ249900.1	NT	SP:C40H1.1 CE00109 OVARIAN PROTEIN ;
10976	23491	36521	1.76	1.0E-112	BE280479.1	EST_HUMAN	Y458410.a1 Scores fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:112243 3' similar to
11051	23564	36599	2.08	1.0E-112	A604584.1	EST_HUMAN	SP:C40H1.1 CE00109 OVARIAN PROTEIN ;
11082	23574	36611	4.71	1.0E-112	AW377670.1	EST_HUMAN	Homo sapiens mRNA for secreted modular calcium-binding protein (smoc1 gene)
							601155323F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138888 5'
							IL-BT061-311288-009 BT061 Homo sapiens cDNA
							PMO-CT0237-141089-001-H02 CT0237 Homo sapiens cDNA

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
772	13391	25890	5.13	1.0E-113	A385588.1	EST_HUMAN	ac09501.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953625 3'
772	13391	25891	5.13	1.0E-113	A385588.1	EST_HUMAN	ac09501.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953625 3'
978	13590	28105	6.33	1.0E-113	M11965.1	NT	Human X-linked phosphoglycerate kinase gene, exon 8
1588	14181	28713	2.48	1.0E-113	A385588.1	EST_HUMAN	ac09501.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953625 3'
1883	15385	27128	0.82	1.0E-113	AF240775.1	NT	Homo sapiens eIF4E-transcript mRNA, complete cds
2142	14720	27281	1.02	1.0E-113	BF518218.1	EST_HUMAN	UJ-H-BW1-ant-f-03-Q-UJ.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3082876 3'
3184	15778	28249	2.08	1.0E-113	AJ223948.1	NT	Homo sapiens mRNA for putative RNA helicase, 3' end
5454	24852		3.07	1.0E-113	BE780858.1	EST_HUMAN	601489465F1 NIH_MGC 67 Homo sapiens cDNA clone IMAGE:3872536 5'
5684	18311	30808	0	1.0E-113	AU127214.1	EST_HUMAN	AU127214 NT2RP2 Homo sapiens cDNA clone NT2RP2000807 5'
6080	18897	31444	3.88	1.0E-113	AU140291.1	EST_HUMAN	AU140291 PLACE2 Homo sapiens cDNA clone PLACE2000274 5'
6108	18722	31475	1	1.0E-113	AF016535.1	NT	Homo sapiens P-glycoprotein (mdr1) mRNA, complete cds
6220	18830	31604	2.43	1.0E-113	11525737	NT	Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetyl-galactosaminyltransferase 8 (GalNAc-T8) (GALNT8), mRNA
6304	18911	31684	0.88	1.0E-113	9861249	NT	Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 4 (ABCB4), transcript variant B, mRNA
6304	18911	31685	0.88	1.0E-113	9861249	NT	Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 4 (ABCB4), transcript variant B, mRNA
6458	19059	31844	0.71	1.0E-113	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
6458	19059	31845	0.71	1.0E-113	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
7382	19888	32751	0.77	1.0E-113	BE282181.1	EST_HUMAN	601152078F1 NIH_MGC 19 Homo sapiens cDNA clone IMAGE:3508302 5'
7382	19888	32752	0.77	1.0E-113	BE282181.1	EST_HUMAN	601152078F1 NIH_MGC 19 Homo sapiens cDNA clone IMAGE:3508302 5'
8024	21561	34488	3	1.0E-113	BE382642.1	EST_HUMAN	601287709F1 NIH_MGC 19 Homo sapiens cDNA clone IMAGE:3627554 5'
8024	21561	34489	3	1.0E-113	BE382642.1	EST_HUMAN	601287709F1 NIH_MGC 19 Homo sapiens cDNA clone IMAGE:3627554 5'
8322	21838		0.72	1.0E-113	BE772967.1	EST_HUMAN	RC1-F10134-280600-021-d02 F10134 Homo sapiens cDNA
9745	22243	35224	1.2	1.0E-113	11428367	NT	Homo sapiens transmembrane protein 2 (TMEM2), mRNA
9843	22341	35323	0.55	1.0E-113	M21535.1	NT	Human erg protein (eta-related gene) mRNA, complete cds
9863	22458	35441	0.81	1.0E-113	5453987	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
9863	22458	35442	0.81	1.0E-113	5453987	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
11002	23518	36551	1.71	1.0E-113	AW500519.1	EST_HUMAN	UJ-HF-BN0-ah-b-12-Q-UJ.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077328 5'
11011	23525	36559	2.11	1.0E-113	AW630291.1	EST_HUMAN	hh81a09.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2888178 5' similar to TR:060327 060327 KIAA0584 PROTEIN;
11011	23525	36560	2.11	1.0E-113	AW630291.1	EST_HUMAN	hh81a09.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2888178 5' similar to TR:060327 060327 KIAA0584 PROTEIN;
11087	19059	31844	1.58	1.0E-113	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11097	19059	31845	1.58	1.0E-113	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
11141	23849	36881	3.51	1.0E-113	BE282988.1	EST_HUMAN	601105529F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2888368 5'
11370	23822	36884	2.53	1.0E-113	AA580720.1	EST_HUMAN	nc80603.1 NCI_CGAP_GC1 Homo sapiens cDNA clone IMAGE:797069 5' similar to SW:FEN1_HUMAN
11370	23822	36885	2.53	1.0E-113	AA580720.1	EST_HUMAN	nc80603.1 NCI_CGAP_GC1 Homo sapiens cDNA clone IMAGE:797069 5' similar to SW:FEN1_HUMAN
62	12741	25213	1.2	1.0E-114	Y17151.2	NT	P39748 FLAP ENDONUCLEASE-1;
62	12741	25214	1.2	1.0E-114	Y17151.2	NT	nc80603.1 NCI_CGAP_GC1 Homo sapiens cDNA clone IMAGE:797069 5' similar to SW:FEN1_HUMAN
62	12741	25215	1.2	1.0E-114	Y17151.2	NT	P39748 FLAP ENDONUCLEASE-1;
673	13297	25779	22.22	1.0E-114	T70551.1	EST_HUMAN	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
1109	13713	26223	2.93	1.0E-114	8823087	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
1358	13950	26476	3.57	1.0E-114	7657529	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
1684	14276	26809	1.26	1.0E-114	6631094	NT	Homo sapiens hypothetical protein FLJ20080 (FLJ20080), mRNA
1711	14304	26841	7.13	1.0E-114	6679073	NT	Homo sapiens rhoboid tumor deletion region protein 1 (RTDR1), mRNA
2630	12727	25189	2.13	1.0E-114	AB033102.1	NT	Homo sapiens minichromosome maintenance deficient (S. cerevisiae) 3 (MCM3), mRNA
2630	12727	25190	2.13	1.0E-114	AB033102.1	NT	Homo sapiens nucleoside-like protein 1 (NLP_1), mRNA
3165	15779	28250	2.36	1.0E-114	X04086.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
3207	15819	28295	1.02	1.0E-114	BF206374.1	EST_HUMAN	Homo sapiens mRNA for KIAA1276 protein, partial cds
4088	16894	29142	1.81	1.0E-114	AF149773.1	NT	Human gene for catalase (EC 1.11.1.6) exon 2 mapping to chromosome 11, band p13
4480	17065	29515	0.92	1.0E-114	J03171.1	NT	601868932F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4100214 5'
5324	17896	30302	0.90	1.0E-114	BE275324.1	EST_HUMAN	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
5360	17920	30334	0.93	1.0E-114	AA194468.1	EST_HUMAN	Human interferon-alpha receptor (HuIFN-alpha-Rec) mRNA, complete cds
5597	18227	30674	1.36	1.0E-114	4508880	NT	601122173F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346099 5'
5597	18227	30675	1.36	1.0E-114	4508880	NT	zfp5605.1 Stratagene muscle 937209 Homo sapiens cDNA clone IMAGE:628632 5' similar to contains
5781	18408	31122	1.35	1.0E-114	9257201	NT	MER22.13 MER22 repetitive element;
7137	19476		1.13	1.0E-114	AB041533.1	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A) mRNA
7268	19816	32674	1.2	1.0E-114	AJ134187.1	EST_HUMAN	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A) mRNA
7268	19816	32675	1.2	1.0E-114	AJ134187.1	EST_HUMAN	(TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A) mRNA
7328	19853	32715	7.05	1.0E-114	Y18000.1	NT	(TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7328	19863	32716	7.05	1.0E-114	Y18000.1	NT	Homo sapiens NF2 gene
7832	20374	33280	1.88	1.0E-114	4557800	NT	Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 2 (GABRA2) mRNA
8108	20849	33557	1.81	1.0E-114	A1363139.1	EST_HUMAN	q68d06.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2017163 3'
8108	20849	33558	1.81	1.0E-114	A1363139.1	EST_HUMAN	q68d06.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2017163 3'
8635	21174	34093	4.12	1.0E-114	U63041.1	NT	Human neural cell adhesion molecule CD58 mRNA, complete cds
8702	21241	34165	5.52	1.0E-114	AB011133.1	NT	Homo sapiens mRNA for KIAA0561 protein, partial cds
8702	21241	34168	5.52	1.0E-114	AB011133.1	NT	Homo sapiens mRNA for KIAA0561 protein, partial cds
8110	21848	34586	0.92	1.0E-114	BF108832.1	EST_HUMAN	789g12.x1 Soares NSF FB 9W OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3528847 3' similar to TR:Q8UHN6 Q8UHN6 TRANSMEMBRANE PROTEIN 2 ;
8335	21849		18.44	1.0E-114	AW327455.1	EST_HUMAN	dq03r05.x1 NIH_MGC_2 Homo sapiens cDNA clone IMAGE:2846744 5'
8384	20322	33227	3.14	1.0E-114	AF077754.1	NT	Homo sapiens tyrosine kinase pp60c-erb (SRC) gene, exon 12 and partial cds
8487	21892		6.13	1.0E-114	M13336.1	NT	Human ceruloplasmin mRNA
10045	22540	35537	0.94	1.0E-114	BE870004.1	EST_HUMAN	801446752F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3853500 5'
10068	22581	35558	1.32	1.0E-114	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
10434	22828	35935	0.71	1.0E-114	BE171894.1	EST_HUMAN	MRO-HT0559-250200-002-d07 HT0559 Homo sapiens cDNA
10886	23188		13.62	1.0E-114	BE302898.1	EST_HUMAN	ba73g12.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2906088 5' similar to gb:X17208 40S RIBOSOMAL PROTEIN S4 (HUMAN); gb:M20632 Mouse LLRep3 protein mRNA from a repetitive element, complete (MOUSE);
11070	23582	36622	3.31	1.0E-114	AV733454.1	EST_HUMAN	AV733454 cda Homo sapiens cDNA clone cdABA08 5'
11070	23582	36623	3.31	1.0E-114	AV733454.1	EST_HUMAN	AV733454 cda Homo sapiens cDNA clone cdABA08 5'
12137	25083		3.79	1.0E-114	11418041	NT	Homo sapiens TNF-inducible protein GG12-1 (GG12-1), mRNA
12410	24585	30909	2.85	1.0E-114	11034850	NT	Homo sapiens hypothetical protein (DJ1042K10.2), mRNA
12410	24585	30910	2.85	1.0E-114	11034850	NT	Homo sapiens hypothetical protein (DJ1042K10.2), mRNA
25	12704	25162	6.12	1.0E-115	4758111	NT	Homo sapiens HLA-B associated transcript-1 (D8S31E) mRNA
135	12800	25288	2.34	1.0E-115	4505838	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
139	12804		8.73	1.0E-115	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
314	12888	25456	3.77	1.0E-115	AW804759.1	EST_HUMAN	QV4-UM0084-300300-158-508 UM0084 Homo sapiens cDNA
561	13182	25870	0.95	1.0E-115	A1339208.1	EST_HUMAN	q08r01.x1 NCI_CGAP_GC4 Homo sapiens cDNA clone IMAGE:1948809 3' similar to TR:000536 000536
561	13182	25871	0.95	1.0E-115	A1339208.1	EST_HUMAN	TTF-I INTERACTING PEPTIDE 5 ;
819	13436	25942	1.29	1.0E-115	5174702	NT	q08r01.x1 NCI_CGAP_GC4 Homo sapiens cDNA clone IMAGE:1948809 3' similar to TR:000536 000536
819	13436	25943	1.29	1.0E-115	5174702	NT	TTF-I INTERACTING PEPTIDE 5 ;
821	13438	25945	180.74	1.0E-115	4503794	NT	Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
							Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
							Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
							Homo sapiens ferritin, heavy polypeptide 1 (FTH1) mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLASTE Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1606	14168	26730	1.2	1.0E-115	AF228180.1	NT	Homo sapiens alpha-aminoadipate semialdehyde synthase mRNA, complete cds
1606	14168	26731	1.2	1.0E-115	AF228180.1	NT	Homo sapiens alpha-aminoadipate semialdehyde synthase mRNA, complete cds
1881	14467	27025	1.19	1.0E-115	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
2126	14703	27273	1.11	1.0E-115	BE745468.1	EST_HUMAN	601579838F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928832 5'
2126	14703	27274	1.11	1.0E-115	BE745468.1	EST_HUMAN	601579838F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928832 5'
3149	15763	28230	2.81	1.0E-115	AJ245022.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
3149	15763	28231	2.81	1.0E-115	AJ245022.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
3519	16124	28604	2.12	1.0E-115	AJ277882.1	NT	Homo sapiens partial TTN gene for titin
4115	16709	29184	4.23	1.0E-115	AB002348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
4353	16840	29382	1.31	1.0E-115	AL137163.1	NT	Novel human gene mapping to chromosome X
4480	17075	29525	2.98	1.0E-115	6812659	NT	Homo sapiens sir2-like 3 (SIRT3), mRNA
4529	17113	29557	4.4	1.0E-115	4758279	NT	Homo sapiens EphA4 (EPHA4) mRNA
4783	17363	29813	2.89	1.0E-115	AL098857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
4783	17363	29814	2.89	1.0E-115	AL098857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
5032	17606	30050	3.78	1.0E-115	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C068
5032	17606	30051	3.78	1.0E-115	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C068
5550	18182	30597	2.42	1.0E-115	AW970335.1	EST_HUMAN	EST382416 IMAGE resequences, MAGK Homo sapiens cDNA
5617	18248	30697	1.07	1.0E-115	BF665387.1	EST_HUMAN	6021193348F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4276738 5'
6732	18368	31063	1.79	1.0E-115	11425128	NT	Homo sapiens similar to ER to nucleus signalling 1 (H. sapiens) (LOC83433), mRNA
5732	18358	31084	1.79	1.0E-115	11425128	NT	Homo sapiens similar to ER to nucleus signalling 1 (H. sapiens) (LOC83433), mRNA
5889	18491	31217	1.1	1.0E-115	A1828709.1	EST_HUMAN	au044g01.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2518588 3' similar to gb.L07807
5889	18491	31218	1.1	1.0E-115	A1828709.1	EST_HUMAN	DYNAMIN-1 (HUMAN);
6408	19011	31783	0.89	1.0E-115	11428788	NT	Homo sapiens sperm surface protein (HSS), mRNA
6408	19011	31784	0.89	1.0E-115	11428788	NT	Homo sapiens sperm surface protein (HSS), mRNA
6529	19128	31823	20.52	1.0E-115	11428038	NT	Homo sapiens similar to ribosomal protein S26 (H. sapiens) (LOC83436), mRNA
6649	19245	32047	1.74	1.0E-115	7681883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
6649	19245	32048	1.74	1.0E-115	7681883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
7014	19512	32333	0.89	1.0E-115	T86774.1	EST_HUMAN	y488608.r1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:115085 5' similar to
7322	19849	32709	1.16	1.0E-115	A1076598.1	EST_HUMAN	SP-DPOG_YEAST P15801 DNA POLYMERASE GAMMA ;
7322	19849	32710	1.16	1.0E-115	A1076598.1	EST_HUMAN	cc31a08.x1 Scores_total_fetus_Nb2HFB_9w Homo sapiens cDNA clone IMAGE:1876914 3'
7322	19849	32710	1.16	1.0E-115	A1076598.1	EST_HUMAN	cc31a08.x1 Scores_total_fetus_Nb2HFB_9w Homo sapiens cDNA clone IMAGE:1876914 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7438	19882	32828	6.85	1.0E-115	AB023212.1	NT	Homo sapiens mRNA for KIAA0905 protein, partial cds
8101	20642	33553	12.93	1.0E-115	BE830187.1	EST_HUMAN	RC6-ET0081-130700-011-G01 ET0081 Homo sapiens cDNA
8101	20642	33554	12.93	1.0E-115	BE830187.1	EST_HUMAN	RC6-ET0081-130700-011-G01 ET0081 Homo sapiens cDNA
8747	21286	34207	4.14	1.0E-115	11434772	NT	Homo sapiens eukaryotic translation initiation factor 4B (EIF4B), mRNA
9890	22189	35162	0.58	1.0E-115	BF382029.1	EST_HUMAN	601816352F1 NIH_MGC 56 Homo sapiens cDNA clone IMAGE:4050108 5'
9910	22407	35382	2.13	1.0E-115	AB002336.1	NT	Human mRNA for KIAA0338 gene, partial cds
9910	22407	35383	2.13	1.0E-115	AB002336.1	NT	Human mRNA for KIAA0338 gene, partial cds
10414	22808	35908	1.08	1.0E-115	AI221878.1	EST_HUMAN	cg99e09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843338 3'
10414	22808	35907	1.08	1.0E-115	AI221878.1	EST_HUMAN	cg99e09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843338 3'
10420	22914	35914	0.88	1.0E-115	AI524687.1	EST_HUMAN	th12a07.x1 NCI_CGAP_OLL1 Homo sapiens cDNA clone IMAGE:2118038 3' similar to TR:O16129 O16129
10448	22942	35852	0.79	1.0E-115	BE868265.1	EST_HUMAN	PHENYLALANINE TRNA SYNTHETASE
10506	23130	36144	3.70	1.0E-115	AW571544.1	EST_HUMAN	601509878F1 NIH_MGC 71 Homo sapiens cDNA clone IMAGE:3911610 5'
11140	23648	36889	1.94	1.0E-115	BE045890.1	EST_HUMAN	h054c10.x1 NCI_CGAP_Pan3 Homo sapiens cDNA clone IMAGE:3123186 3' similar to TR:O88378 O88378
11140	23648	36890	1.94	1.0E-115	BE045890.1	EST_HUMAN	PRP4 PROTEIN KINASE HOMOLOG
11276	23729	36784	2.64	1.0E-115	4502528	NT	h054c10.x1 NCI_CGAP_Pan3 Homo sapiens cDNA clone IMAGE:3123186 3' similar to TR:O88378 O88378
11698	24111		1.46	1.0E-115	AF240786.1	NT	PRP4 PROTEIN KINASE HOMOLOG
598	13227	25701	2.19	1.0E-116	BE275502.1	EST_HUMAN	Homo sapiens calcium channel, voltage-dependent, alpha 1E subunit (CACNA1E) mRNA
833	13450	25857	1.23	1.0E-116	4507334	NT	genes, complete cds
892	13508		0.9	1.0E-116	4507334	NT	601121347F1 NIH_MGC 20 Homo sapiens cDNA clone IMAGE:2888875 5'
2040	14622	27180	3.39	1.0E-116	5174478	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
2040	14622	27191	3.39	1.0E-116	5174478	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
2072	14852	27224	1.95	1.0E-116	AU133080.1	EST_HUMAN	Homo sapiens pericentriin (PCNT) mRNA
2145	15458	27293	2.87	1.0E-116	M19824.1	NT	AU133080 NT2RP4 Homo sapiens cDNA clone NT2RP4001228 5'
2145	15458	27294	2.87	1.0E-116	M19824.1	NT	Human apolipoprotein B-100 (apoB) gene, exons 17 and 18
2346	14917	27491	1.87	1.0E-116	5453941	NT	Human apolipoprotein B-100 (apoB) gene, exons 17 and 18
2380	14949		0.97	1.0E-116	U78308.1	NT	Homo sapiens protein phosphatase, EF hand calcium-binding domain 1 (PPEF1) mRNA
2497	15081	27635	2.84	1.0E-116	AB018333.1	NT	Human olfactory receptor olfr17-201-1 (OR17-201-1) gene, olfactory receptor olfr17-32 (OR17-32) gene and
2762	15404	27863	2.18	1.0E-116	BE868256.1	EST_HUMAN	olfactory receptor pseudo_olfr17-01 (OR17-01) pseudogene, complete cds
							Homo sapiens mRNA for KIAA0700 protein, partial cds
							601513337F1 NIH_MGC 71 Homo sapiens cDNA clone IMAGE:3914600 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3209	15821	28298	4.18	1.0E-116	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
3209	15821	28297	4.18	1.0E-116	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
4467	17053	29497	2.11	1.0E-116	5031954	NT	Homo sapiens sodium phosphate transporter 3 (NPT3) mRNA
4981	17555	29697	1.88	1.0E-116	A1807098.1	EST_HUMAN	PM-BT135-070490-016 BT135 Homo sapiens cDNA
5363	17923	30337	0.88	1.0E-116	AJ243213.1	NT	Homo sapiens partial 5-HT4 receptor gene, exons 2 to 5
5483	18117	30525	0.82	1.0E-116	A1302062.1	EST_HUMAN	q18d04.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1838895 3' similar to contains element MER25 repetitive element:
6132	18746	31502	2.1	1.0E-116	W42822.1	EST_HUMAN	z24407.r1 Soares_sarcomat_fibroblasts_NIH-SF Homo sapiens cDNA clone IMAGE:323245 5' similar to SW:MDHM_MOUSE P08249 MALATE DEHYDROGENASE, MITOCHONDRIAL PRECURSOR;
6359	18963	31740	1.81	1.0E-116	AB046856.1	NT	Homo sapiens mRNA for KIAA1638 protein, partial cds
6359	18963	31741	1.81	1.0E-116	AB046856.1	NT	Homo sapiens mRNA for KIAA1638 protein, partial cds
6423	19028	31809	1.14	1.0E-116	BE408097.1	EST_HUMAN	601302281F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638784 5'
6530	19130	31924	1.98	1.0E-116	BF877910.1	EST_HUMAN	602084730F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249087 5'
6637	19233		1.82	1.0E-116	BE158133.1	EST_HUMAN	MIR2-HT0378-210200-102-604 HT0378 Homo sapiens cDNA
7023	19557	32382	2.08	1.0E-116	C02844.1	EST_HUMAN	C02844 Human heart cDNA (Nakamura) Homo sapiens cDNA clone 3NH00567
7254	19782	32638	7.18	1.0E-116	AV716314	EST_HUMAN	AV716314 DCB Homo sapiens cDNA clone DCBCCG08 5'
8310	20851	33775	1.4	1.0E-116	AA354256.1	EST_HUMAN	EST62885 Jurkat T-cells V Homo sapiens cDNA 5' end similar to similar to keratin 2
8310	20851	33776	1.4	1.0E-116	AA354256.1	EST_HUMAN	EST62885 Jurkat T-cells V Homo sapiens cDNA 5' end similar to similar to keratin 2
8416	20956	33873	1.49	1.0E-116	A1904151.1	EST_HUMAN	CM-BT043-090289-075 BT043 Homo sapiens cDNA
8688	21407	34331	1.15	1.0E-116	BE565607.1	EST_HUMAN	601338288F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3880880 5'
9028	21565	34494	2.75	1.0E-116	A1216352.1	EST_HUMAN	q108c05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1844168 3' similar to gb:X53741_mart FIBULIN-1, ISOFORM A PRECURSOR (HUMAN);
9692	22082	35058	1.38	1.0E-116	11418848	NT	Homo sapiens laminin, alpha 2 (merocin, congenital muscular dystrophy) (LAMA2), mRNA
10171	22686	35061	0.67	1.0E-116	AJ277441.1	NT	Homo sapiens partial mRNA for xylosyltransferase I (XT-I gene)
10171	22688	35062	0.67	1.0E-116	AJ277441.1	NT	Homo sapiens partial mRNA for xylosyltransferase I (XT-I gene)
10260	22745	35733	0.82	1.0E-116	BE158913.1	EST_HUMAN	QV4-HT0401-281298-063-c08 HT0401 Homo sapiens cDNA
10567	23103	36117	3.88	1.0E-116	BF335849.1	EST_HUMAN	CM2-CT0482-300800-349-e08 CT0482 Homo sapiens cDNA
11015	23528	36565	3.63	1.0E-116	A1367140.1	EST_HUMAN	q141e04.x1 Soares_NhlMPu_S1 Homo sapiens cDNA clone IMAGE:1835102 3' similar to WP-B0405.7 CE01765:
12458	24948		3.62	1.0E-116	AL134888.1	EST_HUMAN	DKFZp762L1110_r1 762 (synonym: hme2) Homo sapiens cDNA clone DKFZp762L1110 5'
584	13214	25681	1.88	1.0E-117	4826836	NT	Homo sapiens acetyl-Coenzyme A carboxylase alpha (ACACA), mRNA
1116	15433	26231	1.46	1.0E-117	AF124393.1	NT	Mus musculus fragile-X-related protein 1 (Fxr) gene, exons 13a through 15
1268	13865	26382	0.81	1.0E-117	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1789	14379	28623	1.28	1.0E-117	AF123320.1	NT	Homo sapiens lymphocyte activation-associated protein mRNA, complete cds
1871	14457	27014	5.27	1.0E-117	M18816.1	NT	Human apolipoprotein B-100 (apoB) gene, exon 10
2252	14826	27402	1.15	1.0E-117	AW957688.1	EST_HUMAN	EST3369769 MAGE resequences, MAGE Homo sapiens cDNA
3308	15017	28394	1.53	1.0E-117	AA978114.1	EST_HUMAN	qp32c11.a1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1578548 3'
4062	16659	29122	8.83	1.0E-117	AA318723.1	EST_HUMAN	EST189414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L29
4436	17022	29462	2.27	1.0E-117	8659564	NT	Homo sapiens collagen, type IV, alpha 5 (Alport syndrome) (COL4A5), mRNA
4677	17259	29710	2.1	1.0E-117	ALD42120.1	EST_HUMAN	DKFP434C1120_r1_434 (synonym: hhes3) Homo sapiens cDNA clone DKFP434C1120 5'
4933	17508	29855	10.14	1.0E-117	AF134304.2	NT	Homo sapiens Scar2 (SCAR2) gene, partial cds
4933	17508	29858	10.14	1.0E-117	AF134304.2	NT	Homo sapiens Scar2 (SCAR2) gene, partial cds
5074	17847	30088	3.29	1.0E-117	AB020673.1	NT	Homo sapiens mRNA for KIAA0888 protein, complete cds
5551	18183	30598	3.8	1.0E-117	BE730508.1	EST_HUMAN	601582657F1 NIH_MGC 20 Homo sapiens cDNA clone IMAGE:3832214 5'
7473	19895	32859	5.22	1.0E-117	L76571.1	NT	Homo sapiens nuclear hormone receptor (shp) gene, 3' end of cds
7473	19895	32860	5.22	1.0E-117	L76571.1	NT	Homo sapiens nuclear hormone receptor (shp) gene, 3' end of cds
7550	20069	32844	4.48	1.0E-117	AV717788.1	EST_HUMAN	AV717788 DCB Homo sapiens cDNA clone DCBBAE01 5'
7550	20069	32845	4.48	1.0E-117	AV717788.1	EST_HUMAN	AV717788 DCB Homo sapiens cDNA clone DCBBAE01 5'
7819	20461	33367	3.77	1.0E-117	AB950145.1	EST_HUMAN	wp86b07.x1 NCI_CGAP_Brc25 Homo sapiens cDNA clone IMAGE:2468629 3' similar to TRC075065
8253	20794	33711	1.07	1.0E-117	10834989	NT	O75096 KIAA0477 PROTEIN ;
8253	20794	33712	1.07	1.0E-117	10834989	NT	Homo sapiens neural cell adhesion molecule 1 (NCAM1), mRNA
8350	20891	33811	1.32	1.0E-117	AB04151.1	EST_HUMAN	Homo sapiens neural cell adhesion molecule 1 (NCAM1), mRNA
8350	20891	33812	1.32	1.0E-117	AB04151.1	EST_HUMAN	CM-BT043-090288-075 BT043 Homo sapiens cDNA
9223	21739	34682	1.73	1.0E-117	D16524.1	NT	CM-BT043-090288-075 BT043 Homo sapiens cDNA
9701	22200	35172	1.71	1.0E-117	BE733922.1	EST_HUMAN	Human gene for very low density lipoprotein receptor, exon 11
9857	24798	35335	0.63	1.0E-117	AF098033.1	NT	601589317F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3843748 5'
10462	22656	35967	1.98	1.0E-117	11420222	NT	Homo sapiens gamma-aminobutyric acid type B receptor 2 (GABABR2) mRNA, complete cds
10737	23262	36277	1.89	1.0E-117	D63776.1	NT	Homo sapiens Drosophila Kelch like protein (DKELCHL), mRNA
10801	23421	36439	1.81	1.0E-117	W80605.1	EST_HUMAN	Human mRNA for KIAA0191 gene, partial cds
10917	23436	36456	1.65	1.0E-117	11424835	NT	zd83b11.1 Soares_fetal_NbrH19W Homo sapiens cDNA clone IMAGE:347228 5' similar to gb:M14219 BONE PROTEOGLYCAN II PRECURSOR (HUMAN);
10917	23436	36457	1.65	1.0E-117	11424835	NT	gb:M14219 BONE PROTEOGLYCAN II PRECURSOR (HUMAN);
11153	23660	36704	3.46	1.0E-117	AB011541.1	NT	Homo sapiens protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1 (PIN1), mRNA
11153	23660	36705	3.46	1.0E-117	AB011541.1	NT	Homo sapiens protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1 (PIN1), mRNA
11272	23725		31.65	1.0E-117	BE269856.1	EST_HUMAN	Homo sapiens mRNA for MEGF8, partial cds
							Homo sapiens mRNA for MEGF8, partial cds
							Homo sapiens mRNA for MEGF8, partial cds
							601186203F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3544296 5'

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11464	23914	36981	2.04	1.0E-117	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
11464	23914	36982	2.04	1.0E-117	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
11936	25026		1.7	1.0E-117	AF224689.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
12662	15433	26231	1.81	1.0E-117	AF124393.1	NT	Mus musculus fragile-X-related protein 1 (Fmr1) gene, exons 13a through 15
74	12752	26231	8.91	1.0E-118	AF161500.1	NT	Homo sapiens HSPC151 mRNA, complete cds
99	12775	26257	0.88	1.0E-118	AL045854.1	EST_HUMAN	DKFZp434056_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434056 5'
543	13174	25654	5.79	1.0E-118	7657016	NT	Homo sapiens hypothetical protein (DJ328E19.C1.1), mRNA
947	15426	26073	1.3	1.0E-118	5174680	NT	Homo sapiens sine oculis homeobox (Drosophila) homolog 1 (SIX1) mRNA
2275	14849	27425	1.93	1.0E-118	BE388705.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2275	14849	27426	1.93	1.0E-118	BE388705.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2275	14849	27427	1.93	1.0E-118	BE388705.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2367	14938		0.98	1.0E-118	AW951729.1	EST_HUMAN	EST363789 MAGE resequences, MAGB Homo sapiens cDNA
2768	15322	27688	2.82	1.0E-118	U07000.1	NT	Human breakpoint cluster region (BCR) gene, complete cds
2768	15322	27689	2.82	1.0E-118	U07000.1	NT	Human breakpoint cluster region (BCR) gene, complete cds
3136	15752		4.01	1.0E-118	Y13932.1	NT	Homo sapiens PRKY exon 7
3229	15941	28321	6.49	1.0E-118	A1347694.1	EST_HUMAN	qp0105.x1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1916769 3'
3229	15941	28322	6.49	1.0E-118	A1347694.1	EST_HUMAN	qp0105.x1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1916769 3'
4162	16753	29204	9.69	1.0E-118	D23680.1	NT	Human mRNA for ribosomal protein, complete cds
4817	17395	29848	1.45	1.0E-118	11425793	NT	Homo sapiens KIAA0478 gene product (KIAA0478), mRNA
5616	18245	30695	1.89	1.0E-118	AF142624.1	NT	Homo sapiens calcium channel gamma 4 subunit (CACNG4) gene, exon 3
5616	18245	30696	1.89	1.0E-118	AF142624.1	NT	Homo sapiens calcium channel gamma 4 subunit (CACNG4) gene, exon 3
5613	18437	31159	1.01	1.0E-118	11422054	NT	Homo sapiens neelin (RELN), mRNA
5630	18513	31239	0.77	1.0E-118	11422054	NT	Homo sapiens neelin (RELN), mRNA
5680	18513	31240	0.77	1.0E-118	U08892.1	NT	Human GS2 gene, exon 6
5644	18564	31294	0.92	1.0E-118	U08892.1	NT	Human GS2 gene, exon 6
6023	18642	31363	1.2	1.0E-118	M55109.1	NT	Human cystic fibrosis transmembrane conductance regulator (CFTR) gene, exon 4
6023	18642	31364	1.2	1.0E-118	11425900	NT	Homo sapiens T-box 4 (TBX4), mRNA
6068	18714	31464	1.4	1.0E-118	11425900	NT	Homo sapiens T-box 4 (TBX4), mRNA
6793	19394	32199	1.58	1.0E-118	11420784	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
6793	19394	32200	1.58	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
7154	19696	32528	1.03	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
7154	19696	32529	1.03	1.0E-118	AL043761.1	EST_HUMAN	DKFZp43400127_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp43400127 5'
7154	19696	32529	1.03	1.0E-118	AL043761.1	EST_HUMAN	DKFZp43400127_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp43400127 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7697	20111	32868	4.89	1.0E-118	11431050	NT	Homo sapiens chromosome 2 open reading frame 3 (C2ORF3), mRNA
7698	20122	32869	0.7	1.0E-118	L46590.1	NT	Homo sapiens very long chain acyl-CoA dehydrogenase gene, exons 1-20, complete cds
7913	20455	33361	2.75	1.0E-118	BE781223.1	EST_HUMAN	601469158F1 NIH_MGC 87 Homo sapiens cDNA clone IMAGE:3872247 5'
8323	20884	33788	6.08	1.0E-118	BE062855.1	EST_HUMAN	QV0-BT0263-060200-097-h03 BT0263 Homo sapiens cDNA
8323	20884	33789	6.08	1.0E-118	BE062855.1	EST_HUMAN	QV0-BT0263-060200-097-h03 BT0263 Homo sapiens cDNA
8328	20889	33792	1.44	1.0E-118	AA443024.1	EST_HUMAN	z08d07.f1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:811789 5'
8328	20889	33793	1.44	1.0E-118	AA443024.1	EST_HUMAN	z08d07.f1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:811789 5'
8607	21148	34061	0.89	1.0E-118	AB002381.1	NT	Human mRNA for KIAA0383 gene, partial cds
8607	21148	34062	0.89	1.0E-118	AB002381.1	NT	Human mRNA for KIAA0383 gene, partial cds
8655	21194	34112	1.61	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
8655	21194	34113	1.61	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
8965	21503	34425	5.31	1.0E-118	BE263134.1	EST_HUMAN	601144983F2 NIH_MGC 19 Homo sapiens cDNA clone IMAGE:3180502 5'
8965	21534	34484	0.52	1.0E-118	AL048474.2	EST_HUMAN	DKFZp586K1824_r1 588 (synonym: hube1) Homo sapiens cDNA clone DKFZp586K1824
9512	22012	34971	1.62	1.0E-118	7657018	NT	Homo sapiens hypothetical protein (D3328E19.C1.1), mRNA
9697	22384	35370	0.62	1.0E-118	AL138321.1	EST_HUMAN	DKFZp547O017_r1 547 (synonym: hbr1) Homo sapiens cDNA clone DKFZp547O017 5'
10237	22732	35723	0.98	1.0E-118	BE736213.1	EST_HUMAN	601307146F1 NIH_MGC 39 Homo sapiens cDNA clone IMAGE:3841603 5'
10237	22732	35724	0.98	1.0E-118	BE736213.1	EST_HUMAN	601307146F1 NIH_MGC 39 Homo sapiens cDNA clone IMAGE:3841603 5'
10277	22772	35761	1.6	1.0E-118	BF195407.1	EST_HUMAN	7n17e09.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:3564785.3 similar to SW:ZF3A_HUMAN
10425	22919	35921	0.52	1.0E-118	AW286351.1	EST_HUMAN	P21754 ZONA PELLUCIDA SPERM-BINDING PROTEIN 3A PRECURSOR ;
							UHL-BW0-elo-07-Q.UJ.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:2729772 3'
							EST168814 HCC cell line (metastasis to liver in mouse) Homo sapiens cDNA 5' end similar to dynein, light chain 1, cytoplasmic
11157	23084	36710	4.87	1.0E-118	AA315007.1	EST_HUMAN	601499514F1 NIH_MGC 70 Homo sapiens cDNA clone IMAGE:3901563 5'
11433	23883	36949	1.94	1.0E-118	BE908876.1	EST_HUMAN	601499514F1 NIH_MGC 70 Homo sapiens cDNA clone IMAGE:3901563 5'
11433	23883	36950	1.94	1.0E-118	BE908876.1	EST_HUMAN	601499514F1 NIH_MGC 70 Homo sapiens cDNA clone IMAGE:3901563 5'
11436	23886	36953	1.69	1.0E-118	BF093687.1	EST_HUMAN	QV0-LN0081-120800-385-b12 LM0081 Homo sapiens cDNA
11436	23886	36954	1.69	1.0E-118	BF093687.1	EST_HUMAN	QV0-LN0081-120800-385-b12 LM0081 Homo sapiens cDNA
							h03e00.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3175474 3' similar to TR:Q8Z2H4
11608	24049	37115	1.58	1.0E-118	BE218235.1	EST_HUMAN	Q8Z2H4 G PROTEIN-COUPLED RECEPTOR LGR4 ;
788	13408	25911	2.89	1.0E-119	AF170462.1	NT	Homo sapiens chloride channel CLCA (CLCA) mRNA, complete cds
1075	16432	26189	1.82	1.0E-119	7705607	NT	Homo sapiens CGI-105 protein (LOC51011), mRNA
1977	14560	27118	2.24	1.0E-118	AB023147.1	NT	Homo sapiens mRNA for KIAA0930 protein, partial cds
3136	15750	28218	1.04	1.0E-119	8922205	NT	Homo sapiens hypothetical protein FLJ10052 (FLJ10052), mRNA
							on10b05.s1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1556241 3' similar to WP:ED4F8.2
3277	15988		0.79	1.0E-119	AA918780.1	EST_HUMAN	CE01214 ;

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4026	16824	20098	1.09	1.0E-119	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
5540	18172	30587	3.45	1.0E-119	AU133398.1	EST_HUMAN	AU133398 NT2RP4 Homo sapiens cDNA clone NT2RP4001991 5'
5553	18185	30600	15.55	1.0E-119	M89914.1	NT	Human neurofibromin (NF1) gene, complete cds
5557	18189	30605	3.01	1.0E-119	BE936121.1	EST_HUMAN	RC1-NN0073-250800-018-g08 NN0073 Homo sapiens cDNA
5625	18284	30723	1.52	1.0E-119	AV683731.1	EST_HUMAN	AV683731 GKCO Homo sapiens cDNA clone GKCDH103 5'
6278	18884	31652	5.76	1.0E-119	AU150703.1	EST_HUMAN	qb77c08.x1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:1706128 3' similar to SW:K1CJ_MOUSE_P02535 KERATIN, TYPE I CYTOSKELETAL 10:
6429	19032	31815	0.88	1.0E-119	AF315883.1	NT	Homo sapiens matrix metalloproteinase 28 (MMP28) mRNA, complete cds
6429	19032	31816	0.88	1.0E-119	AF315883.1	NT	Homo sapiens matrix metalloproteinase 28 (MMP28) mRNA, complete cds
6473	19074	31857	1.06	1.0E-119	AF478732.1	EST_HUMAN	tm23f10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2157451 3'
6588	19185	31887	2.82	1.0E-119	X08282.1	NT	Human c-fos proto-oncogene
6598	19195	32000	4.8	1.0E-119	AW974193.1	EST_HUMAN	EST388286 IMAGE resequencing, MAGM Homo sapiens cDNA
7440	18884	32830	1.27	1.0E-119	BE796814.1	EST_HUMAN	601592005F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3946081 5'
8596	21135	34050	0.84	1.0E-119	BE615150.1	EST_HUMAN	601280584F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3622528 5'
8670	22168	35145	0.55	1.0E-119	11545821	NT	Homo sapiens melanoma differentiation associated protein-5 (MDA5), mRNA
8821	22319	35303	1.04	1.0E-119	11036843	NT	Homo sapiens KIAA0477 gene product (KIAA0477), mRNA
10145	22840	35830	2.78	1.0E-119	AA465124.1	EST_HUMAN	aa3205.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:814977 5'
10398	22892	35888	0.82	1.0E-119	AJ297701.1	NT	Homo sapiens partial IL-12RB1 gene for IL-12 receptor beta1 chain, exons 16-17
10438	22932	35839	0.86	1.0E-119	11425837	NT	Homo sapiens hypothetical protein FLJ10206 (FLJ10206), mRNA
10438	22932	35940	0.86	1.0E-119	11425837	NT	Homo sapiens hypothetical protein FLJ10206 (FLJ10206), mRNA
10502	22966	36005	3.99	1.0E-119	AB032281.1	NT	Homo sapiens Sod mRNA for stearyl-CoA desaturase, complete cds
11082	23594		10.54	1.0E-119	BF569571.1	EST_HUMAN	602186072F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310633 5'
11987	25012		3.05	1.0E-119	AW847519.1	EST_HUMAN	RC3-CT0212-240899-011-403 CT0212 Homo sapiens cDNA
268	12917	26404	0.85	1.0E-120	AB018301.1	NT	Homo sapiens mRNA for KIAA0768 protein, partial cds
323	12977	25485	0.77	1.0E-120	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
1078	13684	26195	2.62	1.0E-120	AF248540.1	NT	Homo sapiens intersecin 2 (SH3D1B) mRNA, complete cds
1079	13684	26198	2.62	1.0E-120	AF248540.1	NT	Homo sapiens intersecin 2 (SH3D1B) mRNA, complete cds
1471	14063	26598	3.24	1.0E-120	N44873.1	EST_HUMAN	yy40g12.r1 Soares_melanocyte_ZNblm Homo sapiens cDNA clone IMAGE:273768 5'
1645	14237	26772	2.49	1.0E-120	AF187706.1	NT	Homo sapiens cytochrome-rich repeat-containing protein S52 precursor, mRNA, complete cds
1842	14430	26983	1.84	1.0E-120	4557250	NT	Homo sapiens disintegrin and metalloprotease domain 10 (ADAM10) mRNA
3348	12977	25465	1.04	1.0E-120	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
4449	17035	29478	1.88	1.0E-120	AF056490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
4449	17035	29478	1.88	1.0E-120	AF056490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
4768	17350	28801	2.82	1.0E-120	AF088463.1	NT	Homo sapiens stannocalcin (STC) gene, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4789	17360	29802	2.82	1.0E-120	AF098463.1	NT	Homo sapiens stanniocalcin (STC) gene, partial cds
5150	17720	30151	1.11	1.0E-120	AF054821.1	NT	Homo sapiens cytochrome P-450 mRNA, complete cds
5442	17887		0.95	1.0E-120	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
5911	18533	31258	13.5	1.0E-120	BF568222.1	EST_HUMAN	602183394F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300174 5'
5911	18533	31258	13.5	1.0E-120	BF568222.1	EST_HUMAN	602183394F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300174 5'
7573	20089	32865	1.78	1.0E-120	D34619.1	NT	Human TBXAS1 gene for thromboxane synthase, exon 7
7835	20377	33282	1.81	1.0E-120	Y00067.1	NT	Human gene for neurofilament subunit M (NF-M)
7835	20377	33283	1.81	1.0E-120	Y00067.1	NT	Human gene for neurofilament subunit M (NF-M)
8274	20815	33737	2.9	1.0E-120	BF337589.1	EST_HUMAN	602035352F1 NCI_CGAP_Brf64 Homo sapiens cDNA clone IMAGE:4183333 5'
8343	20884	33805	0.8	1.0E-120	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
8343	20884	33806	0.8	1.0E-120	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
8347	20888	33808	2.83	1.0E-120	AB007964.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0485
8347	20888	33809	2.83	1.0E-120	AB007964.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0485
8390	20830	33850	1.13	1.0E-120	AB007934.1	NT	Homo sapiens mRNA for KIAA0465 protein, partial cds
9421	21830	34877	4.8	1.0E-120	BE392102.1	EST_HUMAN	601307738F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3625544 5'
9421	21830	34878	4.8	1.0E-120	BE392102.1	EST_HUMAN	601307738F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3625544 5'
9880	22168	35131	3.07	1.0E-120	BF306541.1	EST_HUMAN	601888956F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122876 5'
9875	22174	35150	8.09	1.0E-120	AU133205.1	EST_HUMAN	AU133205 NT2RP4 Homo sapiens cDNA clone NT2RP4001541 5'
9882	22191	35185	0.89	1.0E-120	AL049801.1	NT	Novel human gene mapping to chromosome 13, similar to rat RhoGAP
9888	22483	35489	2.88	1.0E-120	AB028000.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
11006	23520	36555	14.73	1.0E-120	BE296387.1	EST_HUMAN	601176727F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532015 5'
11222	23753	36810	2.12	1.0E-120	BE867619.1	EST_HUMAN	601443135F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847281 5'
11222	23753	36811	2.12	1.0E-120	BE867619.1	EST_HUMAN	601443135F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847281 5'
11504	23853	37021	1.55	1.0E-120	U94774.1	NT	Human muscle glycogen phosphorylase (PYGM) gene, 5'UTR and exon 1
12153	24385	30875	1.31	1.0E-120	11417882	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
77	12754	26235	0.82	1.0E-121	Y18000.1	NT	Homo sapiens NF2 gene
401	13045	25539	1.88	1.0E-121	AU134963.1	EST_HUMAN	AU134963 PLACE1 Homo sapiens cDNA clone PLACE1000899 5'
753	15423	25887	1.19	1.0E-121	5032192	NT	Homo sapiens TNF receptor-associated factor 1 (TRAF1) mRNA
2008	14590	27150	0.98	1.0E-121	4755139	NT	Homo sapiens inositol polyphosphate-4-phosphatase, type I, 107kD (INPP4A), splice variant a, mRNA
2008	14590	27151	0.98	1.0E-121	4755139	NT	Homo sapiens inositol polyphosphate-4-phosphatase, type I, 107kD (INPP4A), splice variant a, mRNA
2150	14727	27300	1.74	1.0E-121	L70631.1	NT	Homo sapiens metabotropic glutamate receptor 1 beta (mGluR1beta) mRNA, complete cds
2896	15612	28092	1.03	1.0E-121	AF111188.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3117	15731	28201	3.63	1.0E-121	Y19208.1	NT	Homo sapiens hHb3 gene for hair keratin, exons 1 to 9
3117	15731	28202	3.63	1.0E-121	Y19208.1	NT	Homo sapiens hHb3 gene for hair keratin, exons 1 to 9
3589	16193	28877	0.94	1.0E-121	AB037758.1	NT	Homo sapiens mRNA for KIAA1337 protein, partial cds
3589	16193	28878	0.94	1.0E-121	AB037758.1	NT	Homo sapiens mRNA for KIAA1337 protein, partial cds
3741	16342	28810	8.78	1.0E-121	AF155156.2	NT	Homo sapiens adaptor-related protein complex AP-4 epsilon subunit mRNA, complete cds
4424	17009	29452	1.42	1.0E-121	A1263294.1	EST_HUMAN	q57b01.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2005417 3'
5112	17684	30120	3.54	1.0E-121	X91837.1	NT	H. sapiens ECE-1 gene (exon 17)
5472	18108	30425	1.02	1.0E-121	BE222250.1	EST_HUMAN	h08f08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3168119 3'
5750	18376	31086	0.69	1.0E-121	BE271424.1	EST_HUMAN	601140485F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3049820 5'
6868	19545		1.08	1.0E-121	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 22
7042	18062	30451	0.75	1.0E-121	AW880086.1	EST_HUMAN	RC3-NN0068-270400-011-402 NN0068 Homo sapiens cDNA
7042	18062	30452	0.75	1.0E-121	AW880086.1	EST_HUMAN	RC3-NN0068-270400-011-402 NN0068 Homo sapiens cDNA
7878	20420	33328	1.88	1.0E-121	11436217	NT	Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 2 (GABRA2), mRNA
7882	20424	33332	2.19	1.0E-121	D84122.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 8
7882	20424	33333	2.19	1.0E-121	D84122.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 8
9772	22270	35254	0.9	1.0E-121	AW593858.1	EST_HUMAN	ia05g05.y1 Human Pancreatic islets Homo sapiens cDNA 5' similar to TR:075457 075457 CYTOSOLIC PHOSPHOLIPASE A2-GAMMA ;
9772	22270	35255	0.9	1.0E-121	AW593858.1	EST_HUMAN	ia05g05.y1 Human Pancreatic islets Homo sapiens cDNA 5' similar to TR:075457 075457 CYTOSOLIC PHOSPHOLIPASE A2-GAMMA ;
10655	23187	36203	3.45	1.0E-121	11427788	NT	Homo sapiens COX11 (yeast) homolog, cytochrome c oxidase assembly protein (COX11), mRNA
10662	23194	36209	4.2	1.0E-121	AF064200.1	NT	Homo sapiens UDP-glucuronosyltransferase 2B4 precursor (UGT2B4) mRNA, UGT2B4*E458 allele, complete cds
10848	23369	36388	3.51	1.0E-121	7330334	NT	Homo sapiens chloride intracellular channel 4 like (CLIC4L), mRNA
10875	23398	36412	2.11	1.0E-121	N59624.1	EST_HUMAN	y74c01.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:248448 3'
289	12945	25430	1.68	1.0E-122	11528176	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
358	13007	25490	3.01	1.0E-122	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
380	13027	25515	1.61	1.0E-122	11528176	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
915	13328	26047	5.29	1.0E-122	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
1262	13659	26378	4.63	1.0E-122	M20707.1	NT	Human kappa-immunoglobulin germline pseudogene (Chr22.4) variable region (subgroup V kappa II)
1731	14322	26864	1.08	1.0E-122	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S52 precursor, mRNA, complete cds
1750	14340	26887	1.8	1.0E-122	11418424	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
1750	14340	26888	1.8	1.0E-122	11418424	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
1850	14438	26965	6.15	1.0E-122	BE906024.1	EST_HUMAN	601497032F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3686058 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2533	15097	27689	5.48	1.0E-122	BF316170.1	EST_HUMAN	601896173F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4125234 5'
2533	15087	27670	5.48	1.0E-122	BF316170.1	EST_HUMAN	601896173F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4125234 5'
2884	15483	27857	1.11	1.0E-122	AF284717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete cds
4972	17546	28988	1.23	1.0E-122	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease sensitive) (APP), mRNA
5127	17699		1.28	1.0E-122	AW504845.1	EST_HUMAN	UL-HF-BNO-ali-e-03-0-U171 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078948 5'
5752	18378	31089	1.36	1.0E-122	BE256039.1	EST_HUMAN	601113567F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354232 5'
6853	18378	31089	0.96	1.0E-122	BE256039.1	EST_HUMAN	601113567F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354232 5'
7266	19704	32650	0.88	1.0E-122	AA868671.1	EST_HUMAN	ek49h08.a.1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:1409339 3'
8731	21270	34189	0.55	1.0E-122	AJ276801.1	NT	Homo sapiens mRNA for doublesex and mab-3 related transcription factor 1 (DMRT1)
8858	21490	34419	1.37	1.0E-122	11424216	NT	Homo sapiens lethal giant larvae (Drosophila) homolog 2 (LLGL2), mRNA
8247	21773	34723	0.9	1.0E-122	AB59818.1	EST_HUMAN	q932h07.x1 NC1_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2013757 3' similar to SW-MTA1_HUMAN Q13330 METASTASIS-ASSOCIATED PROTEIN MTA1.;
8247	21773	34724	0.9	1.0E-122	AB59818.1	EST_HUMAN	q932h07.x1 NC1_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2013757 3' similar to SW-MTA1_HUMAN Q13330 METASTASIS-ASSOCIATED PROTEIN MTA1.;
10040	22535	35531	0.71	1.0E-122	AL117234.1	NT	Novel human gene mapping to chromosome X, isoform of dhl (proto-oncogene)
10866	23387	36402	1.55	1.0E-122	AW955834.1	EST_HUMAN	EST367804 IMAGE resequences, MAGD Homo sapiens cDNA
11738	24141		3.99	1.0E-122	11418187	NT	Homo sapiens phosphonorminase 1 (PNM1), mRNA
202	12883	25347	19.89	1.0E-123	U31519.1	NT	Human phosphoenolpyruvate carboxylase (PCCK1) gene, promoter region and partial cds
800	13417	26921	2.06	1.0E-123	BF345274.1	EST_HUMAN	802018058F1 NC1_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4153670 5'
800	13417	25922	2.06	1.0E-123	BF345274.1	EST_HUMAN	802018058F1 NC1_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4153670 5'
1051	13658	26169	5.07	1.0E-123	AL103249.2	NT	Homo sapiens chromosome 21 segment HS21C049
1060	13665	26176	5.53	1.0E-123	5803114	NT	Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA
1281	13876	26397	4.2	1.0E-123	4505818	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B) mRNA, and translated products
1281	13876	26398	4.2	1.0E-123	4505818	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B) mRNA, and translated products
2147	14724	27286	3.41	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2147	14724	27287	3.41	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2147	14724	27288	3.41	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2354	14925		5.59	1.0E-123	7705862	NT	Homo sapiens RAB9-like protein (LOC51208), mRNA
3288	15898	28378	0.87	1.0E-123	6912817	NT	Homo sapiens glutathione-peptide cyclotransferase (glutathione cyclase) (GPCT), mRNA
5639	18287	30739	1.6	1.0E-123	L34218.1	NT	Homo sapiens retinoid-binding protein (RALBP) gene, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5638	18287	30740	1.6	1.0E-123	L34219.1	NT	Homo sapiens retinoid-binding protein (CRALBP) gene, complete cds
5769	18395	31109	1.33	1.0E-123	BE798746.1	EST_HUMAN	601591108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3945433 5'
6395	19192	31997	2.14	1.0E-123	AU118435.1	EST_HUMAN	AU118435 HEMBA1 Homo sapiens cDNA clone HEMBA1003591 5'
7078	19848	32498	0.71	1.0E-123	H53188.1	EST_HUMAN	y84603.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:202444 5' similar to SP:YAK1_YEAST P14880 PROTEIN KINASE YAK1:
7084	19655	32484	1.22	1.0E-123	U42224.1	NT	Human growth hormone releasing hormone gene, exon 7
7245	19774	32831	0.69	1.0E-123	U55258.1	NT	Human hBRAVONr-CAM precursor (hBRAVONr-CAM) gene, complete cds
7433	19857	32822	0.73	1.0E-123	11525833	NT	Homo sapiens heparan sulfate (glucosamine) 3-O-sulfotransferase 2 (HS3ST2), mRNA
7638	20150	33034	1.31	1.0E-123	11439439	NT	Homo sapiens 2'-5'-oligoadenylate synthetase 2 (OAS2), mRNA
7647	20159	33046	1.79	1.0E-123	BE263001.1	EST_HUMAN	601152815F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3509182 5'
7764	20272	33170	0.8	1.0E-123	N35941.1	EST_HUMAN	y88d11.r1 Soares melanocyte 2Nbl-HM Homo sapiens cDNA clone IMAGE:268917 5' similar to PIR:S49811
7764	20272	33171	0.8	1.0E-123	N35941.1	EST_HUMAN	S49811 protein kinase PkpA - Phycomyces blakesleeanus:
8472	21012		2.25	1.0E-123	AW371924.1	EST_HUMAN	y88d11.r1 Soares melanocyte 2Nbl-HM Homo sapiens cDNA clone IMAGE:268917 5' similar to PIR:S49811
8281	21891	34838	2.04	1.0E-123	AB007823.1	NT	S49811 protein kinase PkpA - Phycomyces blakesleeanus:
8424	21833	34882	39.79	1.0E-123	U09823.1	NT	RC4-BT0311-251199-012-407 BT0311 Homo sapiens cDNA
11507	24014	37083	5.42	1.0E-123	BF677292.1	EST_HUMAN	Homo sapiens mRNA for KIAA0454 protein, partial cds
11567	24014	37084	5.42	1.0E-123	BF677292.1	EST_HUMAN	Oryctolagus cuniculus New Zealand white elongation factor 1 alpha (Rabefla2) mRNA, complete cds
280	12946	25431	0.93	1.0E-124	4507500	NT	60208879F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4250879 5'
280	12946	25432	0.93	1.0E-124	4507500	NT	60208879F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4250879 5'
286	12952		1.2	1.0E-124	D87675.1	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
511	13144	26630	2.28	1.0E-124	AL183246.2	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
720	13340	25828	4	1.0E-124	AA397551.1	EST_HUMAN	Homo sapiens DNA for amyloid precursor protein, complete cds
720	13340	25830	4	1.0E-124	AA397551.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
769	13407	25912	4.86	1.0E-124	AF155654.1	NT	z81b04.r1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482
841	13457	25968	1.18	1.0E-124	4507500	NT	G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT):
937	13550	26068	5.09	1.0E-124	7705448	NT	z81b04.r1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482
1358	13652	26479	0.82	1.0E-124	11419082	NT	G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT):
1391	13985	26511	8.15	1.0E-124	AF274892.1	NT	Human putative ribosomal protein S1 mRNA
1391	13985	26512	8.15	1.0E-124	AF274892.1	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
							Homo sapiens hypothetical protein (HSPC088), mRNA
							Homo sapiens ring finger protein (RNF), mRNA
							Homo sapiens glucose transporter 3 gene, exons 8, 10, and complete cds
							Homo sapiens glucose transporter 3 gene, exons 8, 10, and complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1851	14430	26808	3.15	1.0E-124	AJ131712.1	NT	Homo sapiens mRNA for nuclear RNA-helicase (nclh61 gene)
2107	14885	27253	1.73	1.0E-124	BE878624.1	EST_HUMAN	601491715F1 NIH_MGC 69 Homo sapiens cDNA clone IMAGE:3883954 5'
3537	16142	28024	0.72	1.0E-124	S78684.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ8/BIR1) gene, exon
3537	16142	28025	0.72	1.0E-124	S78684.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ8/BIR1) gene, exon
3967	16585	29034	0.66	1.0E-124	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
4150	16742	29188	0.8	1.0E-124	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4855	17433	29884	2.18	1.0E-124	AB024089.1	NT	Homo sapiens gene for B120, exon 11
5068	17841		1.29	1.0E-124	M18178.1	NT	Human fibronectin gene extra type III repeat (EDII), exon x+1
5258	17819	30244	0.87	1.0E-124	AW963300.1	EST_HUMAN	EST375463 IMAGE resequences, MAGH Homo sapiens cDNA
5501	18135	30545	10.59	1.0E-124	8922337	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
5852	18478	31189	1.05	1.0E-124	4508788	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1) mRNA
6048	18667	31406	6.57	1.0E-124	BF686135.1	EST_HUMAN	602124844F1 NIH_MGC 58 Homo sapiens cDNA clone IMAGE:4281635 5'
6317	18824	31701	0.88	1.0E-124	AV711263.1	EST_HUMAN	AV711263 Cu Homo sapiens cDNA clone CuaADF07 5'
6583	19161	31959	0.9	1.0E-124	11420654	NT	Homo sapiens ubiquitin specific protease 9, X chromosome (Drosophila fat facets related) (USP9X), mRNA
7083	19654	32493	3.45	1.0E-124	Y11717.1	NT	M.musculus mRNA for hoxa3 gene
7191	19723	32571	1.23	1.0E-124	BE271295.1	EST_HUMAN	600943771F1 NIH_MGC 8 Homo sapiens cDNA clone IMAGE:2968585 5'
7191	19723	32572	1.23	1.0E-124	BE271295.1	EST_HUMAN	600943771F1 NIH_MGC 8 Homo sapiens cDNA clone IMAGE:2968585 5'
7555	20074	32850	1.15	1.0E-124	AA630331.1	EST_HUMAN	ac08h05.s1 Strategene HeLa cell s3 637216 Homo sapiens cDNA clone IMAGE:955897 3'
8201	20742	33655	18.99	1.0E-124	4506854	NT	Homo sapiens ribosomal protein L5 (RPL5) mRNA
8388	20839	33861	1.45	1.0E-124	AW612106.1	EST_HUMAN	hg04a09.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2963240 3' similar to TR-O85182
8399	20839	33862	1.45	1.0E-124	AW612106.1	EST_HUMAN	O95182 PEROXISOMAL SHORT-CHAIN ALCOHOL DEHYDROGENASE ;
9089	21825	34560	1.42	1.0E-124	AI788894.1	EST_HUMAN	hg04a09.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2963240 3' similar to TR-O85182
9089	21825	34561	1.42	1.0E-124	AI788894.1	EST_HUMAN	wc43g03.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2321428 3'
9411	21820	34968	2.62	1.0E-124	AV645633.1	EST_HUMAN	wc43g03.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2321428 3'
9411	21820	34968	2.62	1.0E-124	AV645633.1	EST_HUMAN	AV645633 GLC Homo sapiens cDNA clone GLCACE04 3'
9498	21898	34954	1.14	1.0E-124	AF022855.1	NT	AV645633 GLC Homo sapiens cDNA clone GLCACE04 3'
9498	21898	34955	1.14	1.0E-124	AF022855.1	NT	Homo sapiens cap250 centrosome associated protein mRNA, complete cds
9526	22026	34984	8.22	1.0E-124	AI767133.1	EST_HUMAN	Homo sapiens cap250 centrosome associated protein mRNA, complete cds
9526	22026	34985	8.22	1.0E-124	AI767133.1	EST_HUMAN	wf83f02.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2400881 3'
9785	22283	35289	1.66	1.0E-124	AW503755.1	EST_HUMAN	wf83f02.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2400881 3'
11213	23716	36770	3.81	1.0E-124	AW685883.1	EST_HUMAN	UHF-BNO-acc-b-04-Q-UJ171 NIH_MGC 50 Homo sapiens cDNA clone IMAGE:3078846 5'
							h05c06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2880806 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11347	23045	36056	2.26	1.0E-124	AI448455.1	EST_HUMAN	519e03.x1 NCJ_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2141880 3' similar to TR:O31682 O31682 YKRS PROTEIN;
11347	23045	36057	2.26	1.0E-124	AI448455.1	EST_HUMAN	519e03.x1 NCJ_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2141880 3' similar to TR:O31682 O31682 YKRS PROTEIN;
11818	13340	25828	6.1	1.0E-124	AA397551.1	EST_HUMAN	z881b04.r1 Stragene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT);
11818	13340	25830	6.1	1.0E-124	AA397551.1	EST_HUMAN	z881b04.r1 Stragene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT);
12284	24474	30834	1.28	1.0E-124	AB028016.1	NT	Homo sapiens mRNA for KIAA1083 protein, partial cds
12542	24860	30832	2.42	1.0E-124	11417882	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12542	24860	30833	2.42	1.0E-124	11417882	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
341	12883		8.05	1.0E-125	AB032888.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
451	12880	25136	3.95	1.0E-125	BE743822.1	EST_HUMAN	601577881F1 NIH_MGC 9 Homo sapiens cDNA clone IMAGE:3926885 5'
672	13298	25777	23.21	1.0E-125	AI110858.1	EST_HUMAN	HA00886 Human fetal liver cDNA library Homo sapiens cDNA
672	13298	25778	23.21	1.0E-125	AI110858.1	EST_HUMAN	HA00886 Human fetal liver cDNA library Homo sapiens cDNA
757	13376	25871	1.7	1.0E-125	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
883	13507	28026	2.88	1.0E-125	AA042813.1	EST_HUMAN	z453c07.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X65857_cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMPO7E (HUMAN);
1036	13848	28158	2.18	1.0E-125	AL183210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1183	13784	28303	1.9	1.0E-125	7682279	NT	Homo sapiens KIAA0744 gene product: histone deacetylase 7 (KIAA0744), mRNA
1712	15448	28842	1.65	1.0E-125	7681887	NT	Homo sapiens KIAA0022 gene product (KIAA0022), mRNA
1836	14424	28975	0.98	1.0E-125	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
1847	14435	28981	2.28	1.0E-125	AF015450.1	NT	Homo sapiens Usurpin-alpha mRNA, complete cds
1847	14435	28982	2.28	1.0E-125	AF015450.1	NT	Homo sapiens Usurpin-alpha mRNA, complete cds
2397	14965	27536	1.03	1.0E-125	AA011278.1	EST_HUMAN	z801g03.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:429568 5'
2832	15193	27784	1.06	1.0E-125	4504686	NT	Homo sapiens inhibitor, alpha (INH-A) mRNA
2832	15193	27785	1.06	1.0E-125	4504686	NT	Homo sapiens inhibitor, alpha (INH-A) mRNA
3925	16523	28981	1.59	1.0E-125	AA042813.1	EST_HUMAN	z453c07.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X65857_cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMPO7E (HUMAN);
4848	17230	28988	2.78	1.0E-125	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
4848	17230	28987	2.78	1.0E-125	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
4724	17305	29748	1.54	1.0E-125	BE315412.1	EST_HUMAN	601141152F1 NIH_MGC 9 Homo sapiens cDNA clone IMAGE:3140798 5'
5832	18554	31281	0.69	1.0E-125	BF683845.1	EST_HUMAN	602138874F1 NIH_MGC 48 Homo sapiens cDNA clone IMAGE:4300770 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6033	18652	31394	1.55	1.0E-125	11438448	NT	Homo sapiens KIAA0985 protein (KIAA0985), mRNA
6052	18870	31409	1.18	1.0E-125	BE175169.1	EST_HUMAN	QV2-HT0577-010500-165-008 HT0577 Homo sapiens cDNA
6089	18705	31453	3.2	1.0E-125	BE892660.1	EST_HUMAN	601433472F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918952 5'
6129	18744	31487	0.75	1.0E-125	AB789004.1	EST_HUMAN	tu87c07.x1 NCJ_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2266108 3' similar to WP-C45G9.2
6895	19291	32094	1.55	1.0E-125	BE562526.1	EST_HUMAN	CE01854;
6895	19291	32095	1.55	1.0E-125	BE562526.1	EST_HUMAN	601335828F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3699790 5'
7121	19491	32277	65.83	1.0E-125	X03427.1	NT	601335828F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3699790 5'
7121	19491	32278	65.83	1.0E-125	X03427.1	NT	Homo sapiens IGF-II gene, exon 5
7538	20058	32932	0.75	1.0E-125	BE278823.1	EST_HUMAN	Homo sapiens IGF-II gene, exon 5
8483	21022	33938	1	1.0E-125	U80288.1	NT	601159076F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3505603 5'
8483	21022	33939	1	1.0E-125	U80288.1	NT	Human chromosome 10 duplicated adrenoleukodystrophy (ALD) gene segment containing exons 8-10
9046	21593	34512	9.65	1.0E-125	BE181640.1	EST_HUMAN	Human chromosome 10 duplicated adrenoleukodystrophy (ALD) gene segment containing exons 8-10
9046	21593	34513	9.65	1.0E-125	BE181640.1	EST_HUMAN	QV1-HT0638-070500-191-d12 HT0638 Homo sapiens cDNA
9303	21903	34852	1.05	1.0E-125	AI595998.1	EST_HUMAN	QV1-HT0638-070500-191-d12 HT0638 Homo sapiens cDNA
10350	22844	35939	0.53	1.0E-125	BE794576.1	EST_HUMAN	tr52b03.x1 NCJ_CGAP_K6d11 Homo sapiens cDNA clone IMAGE:2171981 3' similar to TR:Q14089 Q14089
10388	22882	35976	0.73	1.0E-125	AB002298.1	NT	HYPOTHETICAL PROTEIN;
10562	23088	36112	3.78	1.0E-125	AF049458.1	NT	601580345F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944531 5'
11010	23330	36566	4.05	1.0E-125	AB014567.1	NT	Human mRNA for KIAA0300 gene, partial cds
11169	23678	36722	1.56	1.0E-125	7669505	NT	Homo sapiens IREL gene, exon 5
11174	23681	36727	6.41	1.0E-125	AF028029.1	NT	Homo sapiens mRNA for KIAA0887 protein, partial cds
11279	23732	36787	2.99	1.0E-125	AW812898.1	EST_HUMAN	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
11375	23827	36888	6.08	1.0E-125	BE074287.1	EST_HUMAN	Homo sapiens poly(A) binding protein II (PABP2) gene, complete cds
11375	23827	36889	6.08	1.0E-125	BE074287.1	EST_HUMAN	RC3-ST0168-250200-018-c11 ST0168 Homo sapiens cDNA
809	13423	25929	9.44	1.0E-128	4758007	NT	QV3-BT0569-020200-075-g09 BT0569 Homo sapiens cDNA
809	13426	25932	1.92	1.0E-126	M61836.1	NT	QV3-BT0569-020200-075-g09 BT0569 Homo sapiens cDNA
852	13564	26078	295	1.0E-126	X68735.1	NT	QV3-BT0569-020200-075-g09 BT0569 Homo sapiens cDNA
3108	15723	28194	9.08	1.0E-126	AA180709.1	EST_HUMAN	QV3-BT0569-020200-075-g09 BT0569 Homo sapiens cDNA
3108	15723	28195	9.08	1.0E-126	AA180709.1	EST_HUMAN	Homo sapiens CDC-like kinase (CLK) mRNA
3691	16292	28761	0.98	1.0E-126	X53941.1	NT	Human keratin B1 chain gene, exon 20
3716	16317	28785	2.02	1.0E-126	7667038	NT	H sapiens gene for alpha1-antitrypsin, exon 3
							zo72c03.r1 Stratiogene pancreas (#637208) Homo sapiens cDNA clone IMAGE:592420 5'
							zo72c03.r1 Stratiogene pancreas (#637208) Homo sapiens cDNA clone IMAGE:592420 5'
							H.sapiens DNA for liver cytochrome b5 pseudogene
							Homo sapiens death receptor 6 (DR6), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4902	17477	29933	1.03	1.0E-126	AF101108.1	NT	Homo sapiens collagen type XI alpha-1 (COL11A1) gene, exon 63
4902	17477	29934	1.03	1.0E-126	AF101108.1	NT	Homo sapiens collagen type XI alpha-1 (COL11A1) gene, exon 63
4981	17538	29978	1.31	1.0E-126	N34078.1	EST_HUMAN	yk78c08.r1 Soares melanocyte 2N14HM Homo sapiens cDNA clone IMAGE:287850 5'
6380	18984	31764	3.46	1.0E-126	AA460075.1	EST_HUMAN	z688603.r1 Soares fetal Nb2-IF8_9w Homo sapiens cDNA clone IMAGE:780444 5' similar to
6432	19035	31820	4.2	1.0E-126	AB040958.1	NT	TR:G1145880 G1145880 TTTN;
6432	19035	31821	4.2	1.0E-126	AB040958.1	NT	Homo sapiens mRNA for KIAA1525 protein, partial cds
7511	20032	32897	0.86	1.0E-126	AF267797.1	NT	Homo sapiens mRNA for KIAA1525 protein, partial cds
7511	20032	32898	0.85	1.0E-126	AF267797.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7819	20361	33267	0.92	1.0E-126	AB037715.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7819	20361	33268	0.92	1.0E-126	AB037715.1	NT	Homo sapiens mRNA for KIAA1284 protein, partial cds
7829	20471	33380	5.78	1.0E-126	X18609.1	NT	Homo sapiens mRNA for KIAA1284 protein, partial cds
							Human mRNA for ankyrin (variant 2.1)
8124	20885	33575	0.85	1.0E-126	AA483988.1	EST_HUMAN	ne74b12.e1 NCL_CGAP_Ew1 Homo sapiens cDNA clone IMAGE:909863 similar to SW:TS08_HUMAN
9711	22209	35181	0.52	1.0E-126	4505424	NT	P88088 TUMOR NECROSIS FACTOR-INDUCIBLE PROTEIN TSG-6 PRECURSOR;
10872	23204	36217	1.73	1.0E-126	M83198.1	NT	Homo sapiens neuro-oncological ventral antigen 1 (NOVA1), splice variant 1, mRNA
10738	23263	36278	3.68	1.0E-126	BF983175.1	EST_HUMAN	Human macrophage mannose receptor (MRC1) gene, exon 5
11392	23844	36908	2.32	1.0E-126	BE261860.1	EST_HUMAN	602139138F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4288240 5'
11638	16292	28761	2.62	1.0E-126	X53941.1	NT	601149404F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502129 5'
12304	18036	30498	6.78	1.0E-126	BE743922.1	EST_HUMAN	H. sapiens DNA for liver cytochrome b5 pseudogene
183	12845	25330	4.5	1.0E-127	AB024597.1	NT	601577981F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3826885 5'
183	12845	25331	4.5	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
184	12846	25330	2.78	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
184	12845	25331	2.78	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
285	12951	25439	1.3	1.0E-127	D87675.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
285	12951	25440	1.3	1.0E-127	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
914	13527	26046	2.22	1.0E-127	AF114488.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
949	13581	26075	1.37	1.0E-127	U72621.2	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
1728	14320	26862	1.33	1.0E-127	4827053	NT	Homo sapiens lost on transformation LOT1 mRNA, complete cds
							Homo sapiens ubiquitin specific protease 8 (USP8) mRNA
2111	14689	27256	2.81	1.0E-127	5803065	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 1 (LILRA1), mRNA
2111	14689	27257	2.81	1.0E-127	5803065	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 1 (LILRA1), mRNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2241	14818	27389	5.62	1.0E-127	4506820	NT	Homo sapiens ribosomal protein L28 (RPL28) mRNA
2381	14950	27523	3.29	1.0E-127	AF245505.1	NT	Homo sapiens adican mRNA, complete cds
2640	15189	27773	5.29	1.0E-127	X12881.1	NT	Human mRNA for cyclotactin 18
3753	16354	28822	1.02	1.0E-127	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
3884	16482	28944	0.75	1.0E-127	AW161207.1	EST_HUMAN	eu80e09.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782594 5' similar to
4194	16783	29232	0.69	1.0E-127	AF193188.1	NT	TR:Q15170 Q15170 TRANSCRIPTION FACTOR S-HRELATED PROTEIN ; contains element MER22 repetitive element ;
4303	16889	29332	0.61	1.0E-127	AL163247.2	NT	Homo sapiens delayed rectifier potassium channel subunit Isk mRNA, complete cds
4340	16927	29367	21.24	1.0E-127	7708239	NT	Homo sapiens chromosome 21 segment HS21C047
4340	16927	29368	21.24	1.0E-127	7708239	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594). mRNA
4365	17178	29625	0.68	1.0E-127	AF252297.1	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594). mRNA
4708	17280	29734	5.02	1.0E-127	4506384	NT	Homo sapiens cytochrome P450 retinoid metabolizing protein P450RAL-2 mRNA, complete cds
4739	17319	29811	2.84	1.0E-127	AL163268.2	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
4780	17361	29811	1.04	1.0E-127	8912639	NT	Homo sapiens chromosome 21 segment HS21C088
5884	18506	31232	2.37	1.0E-127	W03547.1	EST_HUMAN	Homo sapiens Ring1 and YY1 binding protein (RYBP). mRNA
5912	18534	31260	0.89	1.0E-127	4826863	NT	z01a10.r1 Soares melanocyte 2Nbl-HM Homo sapiens cDNA clone IMAGE:291268 5' similar to
5970	18591	31328	4.61	1.0E-127	X85764.1	NT	SW:PIP8_RAT P10688 1-PHOSPHATIDYLINOSITOL-4,6-BISPHOSPHATE PHOSPHODIESTERASE DELTA 1 ;
6310	18917	31691	2.21	1.0E-127	X94060.1	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
6463	19064	31849	5.89	1.0E-127	4504778	NT	H. sapiens NOS2 gene, exon 6
6764	19357	32168	0.93	1.0E-127	11421595	NT	H. sapiens TCF11 gene, exon 3-8
7122	19462	32279	0.85	1.0E-127	4826977	NT	Homo sapiens integrin, beta 8 (ITC88) mRNA
7760	20268	33165	1.31	1.0E-127	11421914	NT	Homo sapiens immunoglobulin superfamily, member 3 (IGSF3). mRNA
7760	20268	33168	1.31	1.0E-127	11421914	NT	Homo sapiens resin (RELN) mRNA
7763	20271	33169	0.67	1.0E-127	BF671355.1	EST_HUMAN	Homo sapiens Pendred syndrome (PDS). mRNA
8820	21359	34285	0.7	1.0E-127	11427235	NT	Homo sapiens Pendred syndrome (PDS). mRNA
8820	21359	34288	0.7	1.0E-127	11427235	NT	602161232F1 NIH_MGC_B1 Homo sapiens cDNA clone IMAGE:4282575 5'
9559	22058	35019	4.96	1.0E-127	AF274863.1	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1). mRNA
9558	22058	35020	4.96	1.0E-127	AF274863.1	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1). mRNA
9787	22285	35270	0.69	1.0E-127	AI298932.1	EST_HUMAN	Homo sapiens Chediak-Higashi syndrome 1 (CHS1). mRNA
							Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
							Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
							qms4409.x1 NCJ_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1896449 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10245	22740	35730	2.25	1.0E-127	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
11037	23551	36585	6.54	1.0E-127	11417339	NT	Homo sapiens similar to heat shock 70kD protein 98 (mortalin-2) (H. sapiens) (LOC83184), mRNA
11037	23551	36586	6.54	1.0E-127	11417339	NT	Homo sapiens similar to heat shock 70kD protein 98 (mortalin-2) (H. sapiens) (LOC83184), mRNA
11480	23939	37009	1.9	1.0E-127	BE895415.1	EST_HUMAN	601434784F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919817 5'
11480	23939	37010	1.9	1.0E-127	BE895415.1	EST_HUMAN	601434784F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919817 5'
12046	12845	25330	1.43	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
12046	12845	25331	1.43	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
12553	24464	30882	1.7	1.0E-127	AB011398.1	NT	Homo sapiens gene for AF-6, complete cds
12820	24897		2.23	1.0E-127	AB011398.1	NT	Homo sapiens gene for AF-6, complete cds
485	13118	25605	2.44	1.0E-128	BE385617.1	EST_HUMAN	Homo sapiens gene for AF-6, complete cds
1185	13798	26305	1	1.0E-128	4758081	NT	601278127F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618822 5'
1185	13798	26306	1	1.0E-128	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
2115	14883	27260	4.14	1.0E-128	U02523.1	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
2115	14883	27261	4.14	1.0E-128	U02523.1	NT	Human FAU1P pseudogene, trinucleotide repeat regions
2250	14824	27400	18.53	1.0E-128	4506718	NT	Human FAU1P pseudogene, trinucleotide repeat regions
3441	16048	28527	1.14	1.0E-128	AB033073.1	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
4771	17352	29804	5.43	1.0E-128	11428673	NT	Homo sapiens mRNA for KIAA1247 protein, partial cds
5734	18360	31066	6.97	1.0E-128	X09539.1	NT	Homo sapiens prospero-related homeobox 1 (PROX1), mRNA
6650	19148	31944	2.08	1.0E-128	11420866	NT	H. sapiens gene for inter-alpha-trypsin inhibitor heavy chain H1, exon 12
7010	19508	32328	8.01	1.0E-128	BF224345.1	EST_HUMAN	Homo sapiens phosphodiesterase 1C, calmodulin-dependent (70kD) (PDE1C), mRNA
8206	20747	33659	0.75	1.0E-128	AB037816.1	NT	7q86b10.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE: 3'
8206	20747	33660	0.75	1.0E-128	AB037816.1	NT	Homo sapiens mRNA for KIAA1395 protein, partial cds
							Homo sapiens mRNA for KIAA1395 protein, partial cds
10043	22638	35535	1.62	1.0E-128	AA638198.1	EST_HUMAN	ns04411.1 NCI_CGAP_Ew1 Homo sapiens cDNA clone IMAGE:1182620 similar to TR:G951338 G951338
10588	23123	36137	5.48	1.0E-128	11425254	NT	CHROMOSOME SEGREGATION GENE HOMOLOG CAS.:
							Homo sapiens glutamate receptor, knotted, N-methyl D-aspartate 2D (GRIN2D), mRNA
10587	23131	36145	5.15	1.0E-128	AA926969.1	EST_HUMAN	om8808.st NCI_CGAP_G04 Homo sapiens cDNA clone IMAGE:1552383 3' similar to gb:XS4941 CYCLIN-
11805	24244		4.37	1.0E-129	AW955280.1	EST_HUMAN	DEPENDENT KINASES REGULATORY SUBUNIT 1 (HUMAN);
127	13071	25568	12.08	1.0E-129	S37722.1	NT	EST367360 MAGE resequences, MAGC Homo sapiens cDNA
438	13071	25568	14.64	1.0E-129	S37722.1	NT	Insulin-like growth factor binding protein-2 [human, placenta, Genomic, 1019 nt, segment 2 of 4]
1756	14346	26881	2.48	1.0E-129	AL066880.1	NT	Insulin-like growth factor binding protein-2 [human, placenta, Genomic, 1019 nt, segment 2 of 4]
							Novel human mRNA containing Zinc finger C2H2 type domains
							Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1)
1761	14351	26886	1.62	1.0E-129	AF240788.1	NT	genes, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1761	14351	26897	1.62	1.0E-128	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
1886	14471	27029	2.2	1.0E-128	11418622	NT	Homo sapiens zinc finger protein 76 (expressed in testis) (ZNF76), mRNA
3162	15778	28244	1.41	1.0E-128	Q14585	SWISSPROT	ZINC FINGER PROTEIN HZF-10
3162	15778	28245	1.41	1.0E-128	Q14585	SWISSPROT	ZINC FINGER PROTEIN HZF-10
3162	15778	28246	1.41	1.0E-128	Q14585	SWISSPROT	ZINC FINGER PROTEIN HZF-10
4244	16832	20283	1.95	1.0E-128	AB040882.1	NT	Homo sapiens mRNA for KIAA1459 protein, partial cds
4367	16854	26394	2.57	1.0E-128	AW755254.1	EST_HUMAN	CMYA6 Human cardiac muscle expression library Homo sapiens cDNA clone 4151835 similar to CMYA5
4367	16854	26395	2.57	1.0E-128	AW755254.1	EST_HUMAN	CMYA5 Human cardiac muscle expression library Homo sapiens cDNA clone 4151835 similar to CMYA5
6241	18850	31620	4.78	1.0E-128	AJ006345.1	NT	Cardiomyopathy associated gene 5
7181	19713	32561	4.38	1.0E-128	AJ006345.1	NT	Homo sapiens KVLQT1 gene
7241	19770	32626	14.44	1.0E-128	11420850	NT	Homo sapiens KVLQT1 gene
7535	20055	32828	0.78	1.0E-128	AF041056.1	NT	Homo sapiens WSCR4 gene, exons 3 and 4
7535	20055	32829	0.78	1.0E-128	AF041056.1	NT	Homo sapiens WSCR4 gene, exons 3 and 4
8260	20801		3.93	1.0E-128	AB014534.1	NT	Homo sapiens mRNA for KIAA0634 protein, partial cds
8881	22488	35473	1.16	1.0E-128	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
8881	22488	35474	1.16	1.0E-128	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
11102	23612	36652	3.34	1.0E-128	AA625526.1	EST_HUMAN	af7207.r1 Soares NIH-MIPu_S1 Homo sapiens cDNA clone IMAGE:1047569 5'
11177	19770	32626	11.7	1.0E-128	11420850	NT	Homo sapiens similar to ribosomal protein S28 (H. sapiens) (LOC83684), mRNA
11892	24235		2.32	1.0E-128	H83155.1	EST_HUMAN	Y49405.L1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:199112 5' similar to SP-B48150 B48150 HP-25-HIBERNATION-RELATED PROTEIN - TAMIAS ASIATICUS=ASIAN ;
12287	24494		2.07	1.0E-128	AL120739.1	EST_HUMAN	DKFZp782K171_r1 782 (synonym: hme42) Homo sapiens cDNA clone DKFZp782K171 5'
80	12757	26239	1.85	1.0E-130	7705530	NT	Homo sapiens hypothetical protein (HSPC242), mRNA
1212	13912	26326	1.23	1.0E-130	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
1706	14288	26836	8.52	1.0E-130	BE275192.1	EST_HUMAN	601121985F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346368 5'
1706	14288	26837	8.52	1.0E-130	BE275192.1	EST_HUMAN	601121985F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346368 5'
2027	14609		4.6	1.0E-130	X04092.1	NT	Human gene for catalase (EC 1.11.1.6) exon 9 mapping to chromosome 11, band p13
2127	14705		1.69	1.0E-130	8394394	NT	Homo sapiens candidate taste receptor T2R16 (T2R16), mRNA
2789	15351		7.47	1.0E-130	AJ010230.1	NT	Homo sapiens RET finger protein-like 1 antisense transcript, partial
2903	15520	27889	1.17	1.0E-130	BE584219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685468 5'
2903	15520	27890	1.17	1.0E-130	BE584219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685468 5'
3637	16240	28716	0.96	1.0E-130	AF240698.1	NT	Homo sapiens retinol dehydrogenase homolog isoform-1 (RDH1) mRNA, complete cds

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3631	15520	27989	5.82	1.0E-130	BE594219.1	EST_HUMAN	601343018F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685468 5'
3631	15520	27989	5.82	1.0E-130	BE594219.1	EST_HUMAN	601343018F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685468 5'
4010	16608	28081	1.86	1.0E-130	AW503580.1	EST_HUMAN	UI-HF-BN0-aky-g-06-0-J1,1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078731 5'
4147	16739	28192	1.18	1.0E-130	M87710.1	NT	Human T-cell receptor (V alpha 22.1, J alpha RPI14285-variant, C alpha 1) mRNA
4638	17219	28672	9	1.0E-130	AW843883.1	EST_HUMAN	CMD-CN0045-180200-511-402 CN0045 Homo sapiens cDNA
5258	17821	30246	1.11	1.0E-130	AW368388.1	EST_HUMAN	RC0-CT0318-201189-031-411 CT0318 Homo sapiens cDNA
5258	17821	30247	1.11	1.0E-130	AW368388.1	EST_HUMAN	RC0-CT0318-201189-031-411 CT0318 Homo sapiens cDNA
6910	18589	32396	0.74	1.0E-130	AW843875.1	EST_HUMAN	CMD-CN0045-170200-225-903 CN0045 Homo sapiens cDNA
6910	18589	32397	0.74	1.0E-130	AW843875.1	EST_HUMAN	CMD-CN0045-170200-225-903 CN0045 Homo sapiens cDNA
6923	19582	32411	0.7	1.0E-130	11425446	NT	Homo sapiens estrogen-responsive B box protein (EBBP), mRNA
7301	19828	32687	2.1	1.0E-130	11416777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA
8016	21155		0.98	1.0E-130	AF008551.1	NT	Homo sapiens aurora-related kinase 1 (ARK1) mRNA, complete cds
8753	21292	34212	4.06	1.0E-130	AW868242.1	EST_HUMAN	EST368312 MAGE resequences, MAGD Homo sapiens cDNA
9141	21878	34819	1.97	1.0E-130	AB037756.1	NT	Homo sapiens mRNA for KIAA1335 protein, partial cds
9848	22344		0.78	1.0E-130	AW103454.1	EST_HUMAN	x336e06.x1 NCI_CGAP_OY23 Homo sapiens cDNA clone IMAGE:2585874 3'
4	12884	25140	2.27	0.0E+00	AA228128.1	EST_HUMAN	zr58c04.r1 Scores_NhlhMPu_S1 Homo sapiens cDNA clone IMAGE:687590 5' similar to TR:G222811
4	12884	25141	2.27	0.0E+00	AA228128.1	EST_HUMAN	G222811 ALPHA 1 CHAIN OF TYPE XII COLLAGEN ;
8	12887	25145	1.56	0.0E+00	4885193	NT	G222811 ALPHA 1 CHAIN OF TYPE XII COLLAGEN ;
17	12898	25152	2.85	0.0E+00	8923349	NT	Homo sapiens checkpoint suppressor 1 (CHES1), mRNA
17	12898	25153	2.85	0.0E+00	8923349	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
24	12703	25160	4.28	0.0E+00	D83327.1	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
24	12703	25161	4.28	0.0E+00	D83327.1	NT	Homo sapiens DCR1 mRNA, partial cds
29	12708	25165	30.44	0.0E+00	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
37	12716	25176	38.86	0.0E+00	5802897	NT	Homo sapiens Cdc42 effector protein 2 (CEP2), mRNA
39	12718	25178	23.21	0.0E+00	M58600.1	NT	Human heparin cofactor II (HCF2) gene, exons 1 through 5
42	12721	25182	7.78	0.0E+00	M58600.1	NT	Human heparin cofactor II (HCF2) gene, exons 1 through 5
44	12723	25184	4.41	0.0E+00	6857825	NT	Homo sapiens RNA-binding protein S1, serine-rich domain (RNPS1), mRNA
61	12740	25211	8.23	0.0E+00	Y17151.2	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
61	12740	25212	8.23	0.0E+00	Y17151.2	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
63	12742	25216	1	0.0E+00	D78804.1	EST_HUMAN	HUM5181088 Human placenta polyA+ (TFujwara) Homo sapiens cDNA clone GEN-518108 5'
63	12742	25217	1	0.0E+00	D78804.1	EST_HUMAN	HUM5181088 Human placenta polyA+ (TFujwara) Homo sapiens cDNA clone GEN-518108 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
64	12743	25218	28.22	0.0E+00	U18558.1	NT	Human ribosomal protein L7 (RPL7) mRNA, complete cds
66	12745	25221	11.83	0.0E+00	AW088534.1	EST_HUMAN	cr48e07.x1 Jla bone marrow stroma Homo sapiens cDNA clone HEMSC_cr48e07.3'
68	12745	25222	11.83	0.0E+00	AW088534.1	EST_HUMAN	cr48e07.x1 Jla bone marrow stroma Homo sapiens cDNA clone HEMSC_cr48e07.3'
70	12748	25228	0.8	0.0E+00	M80676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
71	12749		0.85	0.0E+00	M80676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
79	12758	25237	3.68	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
79	12758	25238	3.68	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
82	12756	25237	1.9	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
82	12756	25238	1.9	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
85	12761	25244	0.85	0.0E+00	4501850	NT	Homo sapiens amiloride binding protein 1 (amine oxidase (copper-containing)) (ABP1), nuclear gene encoding mitochondrial protein, mRNA
86	12762		38.11	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
95	12771	25253	37.46	0.0E+00	5018088	NT	Homo sapiens actin, beta (ACTB) mRNA
98	12774	25256	28.23	0.0E+00	U89277.1	NT	Human polyhormetic 1 homolog (HPH1) mRNA, partial cds
105	12781	25263	2.29	0.0E+00	A1114743.1	EST_HUMAN	HA1347 Human fetal liver cDNA library Homo sapiens cDNA
108	12782	25284	2.19	0.0E+00	AB037784.1	NT	Homo sapiens mRNA for KIAA1363 protein, partial cds
112	12786	25288	0.84	0.0E+00	X91213.1	NT	H. sapiens nca1 gene (exon 2)
121	12782	25274	1.98	0.0E+00	A1823701.1	EST_HUMAN	ts38b05.x1 NCI_CGAP_U4 Homo sapiens cDNA clone IMAGE:2230833 3' similar to TR:Q89551 Q89551 MITOCHONDRIAL TRANSCRIPTION TERMINATION FACTOR PRECURSOR. ;
122	12782	25274	2.44	0.0E+00	A1823701.1	EST_HUMAN	ts38b05.x1 NCI_CGAP_U4 Homo sapiens cDNA clone IMAGE:2230833 3' similar to TR:Q89551 Q89551 MITOCHONDRIAL TRANSCRIPTION TERMINATION FACTOR PRECURSOR. ;
123	15383	25275	2.64	0.0E+00	N36040.1	EST_HUMAN	y901h08.l1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:270017 5'
123	15383	25276	2.64	0.0E+00	N36040.1	EST_HUMAN	y901h08.l1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:270017 5'
126	12786	25281	1.12	0.0E+00	4505458	NT	Homo sapiens neuropilin 2 (NRP2) mRNA
136	12801	25289	3.85	0.0E+00	4505838	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
136	12801	25290	3.85	0.0E+00	4505838	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
144	13059	25552	0.8	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC[GAMMA]BP) mRNA
146	12809	25297	0.85	0.0E+00	T56945.1	EST_HUMAN	y83g04.l2 Stratagene fetal spleen (#837205) Homo sapiens cDNA clone IMAGE:88310 5'
146	12809	25298	0.85	0.0E+00	T56945.1	EST_HUMAN	y83g04.l2 Stratagene fetal spleen (#837205) Homo sapiens cDNA clone IMAGE:88310 5'
164	12827		35.47	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
168	12831	25317	2.84	0.0E+00	BF036881.1	EST_HUMAN	601460375F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3963803 5'
170	12833		92.51	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
173	12836	25320	0.75	0.0E+00	AF111168.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes
175	12836	25321	1.22	0.0E+00	BE285973.1	EST_HUMAN	601174270F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3529864 5'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
176	12838	25321	0.84	0.0E+00	BE285973.1	EST_HUMAN	601174270F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3528684 5'
177	12839	25322	2.37	0.0E+00	W73973.1	EST_HUMAN	z682605.f1 Soares_fetal_hairt_NIH19W Homo sapiens cDNA clone IMAGE:345201 5' similar to
178	12840	25323	0.77	0.0E+00	BE182832.1	EST_HUMAN	gb:U16282_cds1 ZINC FINGER PROTEIN CLONE 847 (HUMAN);
179	12840	25324	0.77	0.0E+00	BE182832.1	EST_HUMAN	QV3-HT0457-140200-088-404 HT0457 Homo sapiens cDNA
179	12841	25325	1.97	0.0E+00	AF244088.1	NT	QV3-HT0457-140200-088-404 HT0457 Homo sapiens cDNA
182	12844	25328	24.46	0.0E+00	AL163202.2	NT	Homo sapiens zinc finger protein mRNA, complete cds
182	12844	25328	24.45	0.0E+00	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
183	12853	25336	4.25	0.0E+00	BE018970.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C002
183	12853	25337	4.25	0.0E+00	BE018970.1	EST_HUMAN	b624e12.y1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2863854 5' similar to WP:Y57A10A.Z
188	12858	25340	2.9	0.0E+00	AB018327.1	NT	CE22831;
188	12858	25341	2.9	0.0E+00	AB018327.1	NT	b624e12.y1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2863854 5' similar to WP:Y57A10A.Z
188	12858	25342	1.88	0.0E+00	AB018327.1	NT	CE22831;
188	12859	25343	1.88	0.0E+00	AB018327.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
208	12868	25355	92.14	0.0E+00	D50669.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
213	12874	25360	4.7	0.0E+00	AF273045.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
213	12874	25361	4.7	0.0E+00	AF273045.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
215	12876	25363	8.92	0.0E+00	AF167174.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
215	12876	25364	8.92	0.0E+00	AF167174.1	NT	Human gamma-cytoplasmic actin (ACTGP9) pseudogene
225	15410	25371	33.35	0.0E+00	AI587308.1	EST_HUMAN	Homo sapiens CTCL tumor antigen se14-3 mRNA, complete cds
225	15410	25372	33.35	0.0E+00	AI587308.1	EST_HUMAN	Homo sapiens CTCL tumor antigen se14-3 mRNA, complete cds
227	12887	25374	1.91	0.0E+00	AF195658.1	NT	Homo sapiens chromosome X MSL3-2 protein mRNA, complete cds
231	12891		44.26	0.0E+00	4506832	NT	Homo sapiens chromosome X MSL3-2 protein mRNA, complete cds
232	12892		8.88	0.0E+00	AF132000.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds
239	12898	25382	2.84	0.0E+00	AB018264.1	NT	Homo sapiens ribosomal protein L31 (RPL31) mRNA
240	12899	25382	1.99	0.0E+00	AB018264.1	NT	Homo sapiens TADA1 protein mRNA, complete cds
241	12900	25383	3.13	0.0E+00	6878444	NT	Homo sapiens mRNA for KIAA0721 protein, partial cds
248	12908	25387	0.78	0.0E+00	BE246780.1	EST_HUMAN	Homo sapiens mRNA for KIAA0721 protein, partial cds
							Mus musculus testis-specific protein, Y-encoded-like (Tspy), mRNA
							TCBAP1E4468 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4468

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
248	12908	25388	0.78	0.0E+00	BE246780.1	EST_HUMAN	TCBAP1E4466 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TC8A Homo sapiens cDNA clone TCBAP4466
248	12908	25389	0.78	0.0E+00	BE246780.1	EST_HUMAN	TCBAP1E4466 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TC8A Homo sapiens cDNA clone TCBAP4466
256	12916	25400	0.97	0.0E+00	AB018301.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
256	12916	25401	0.97	0.0E+00	AB018301.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
259	12918	25405	9.57	0.0E+00	5453805	NT	Homo sapiens NS1-associated protein 1 (NSAP1) mRNA
281	12920		11.16	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
288	12925	25411	4.93	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
270	12927	25414	1.82	0.0E+00	X89772.1	NT	H. sapiens mRNA for interferon alpha/beta receptor (long form)
278	12935		7.37	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
281	12947	25433	1.28	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
281	12947	25434	1.28	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
283	12949	25438	1.08	0.0E+00	7706028	NT	Homo sapiens hypothetical protein (LOC51250), mRNA
304	12959		2.01	0.0E+00	D83327.1	NT	Homo sapiens DCR1 mRNA, partial cds
305	12960	25449	2.17	0.0E+00	D83327.1	NT	Homo sapiens DCR1 mRNA, partial cds
305	12960	25450	2.17	0.0E+00	D83327.1	NT	Homo sapiens DCR1 mRNA, partial cds
306	12981		1.14	0.0E+00	AW845283.1	EST_HUMAN	IL2-CT0031-181189-020-B03 CT0031 Homo sapiens cDNA
315	12969	25457	6.39	0.0E+00	4557029	NT	Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 15 (KCNJ15) mRNA
315	12969	25458	6.39	0.0E+00	4557029	NT	Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 15 (KCNJ15) mRNA
326	12980	25468	8.1	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
327	12981	25469	4.44	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
328	15413		23.15	0.0E+00	4506728	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
329	12982	25470	0.99	0.0E+00	4503914	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminimidazole synthetase (GART) mRNA
330	12983		2.5	0.0E+00	AA480002.1	EST_HUMAN	2x18c06.r1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:753984 5'
331	12984	25471	18.8	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
332	12984	25471	19.33	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
338	12988	25475	3.18	0.0E+00	AF114488.1	NT	Homo sapiens intracellular short isoform (ITSN) mRNA, complete cds
349	13000	25484	1.64	0.0E+00	O14887	SWISSPROT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
349	13000	25485	1.64	0.0E+00	O14887	SWISSPROT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
350	13001	25488	3.83	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
351	13001	25488	1.41	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
366	13015	25488	5.41	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
367	13016	25489	1.14	0.0E+00	4505258	NT	Homo sapiens moesin (MSN), mRNA
370	13018	25503	20.33	0.0E+00	4827057	NT	Homo sapiens X-box binding protein 1 (XBP1) mRNA
373	13022	25508	1.49	0.0E+00	U71600.1	NT	Human zinc finger protein zfp31 (zfp31) mRNA, partial cds
376	13026	25512	2.59	0.0E+00	AF231918.1	NT	Homo sapiens chromosome 21 unknown mRNA
378	13028	25513	2.59	0.0E+00	AF231918.1	NT	Homo sapiens chromosome 21 unknown mRNA
378	15414	25514	2.88	0.0E+00	AF231918.1	NT	Homo sapiens chromosome 21 unknown mRNA
381	13028	25516	0.74	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
384	13031	25520	1.3	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (60kD) (GABPA), mRNA
385	13032	25521	1.87	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
386	13032	25521	1.52	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
388	13034	25523	0.83	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
389	13043	25534	3.85	0.0E+00	AU134963.1	EST_HUMAN	AU134963 PLACE1 Homo sapiens cDNA clone PLACE1000899 5'
410	13085	25578	8.92	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
411	13088	25579	2.03	0.0E+00	A363014.1	EST_HUMAN	q981M05.x1 NC1_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2018457 3' similar to gb:X54189 PHOSPHORIBOSYLAMINE--GLYCINE LIGASE (HUMAN);
416	13051	25541	2.98	0.0E+00	AW754180.1	EST_HUMAN	RC2-CT0320-300100-018-409 CT0320 Homo sapiens cDNA
419	13053	25544	1.85	0.0E+00	4503880	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
420	13054	25545	2.21	0.0E+00	4503880	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
420	13054	25546	2.21	0.0E+00	4503880	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
421	13055	25547	1.1	0.0E+00	4503880	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
422	13056	25548	1.48	0.0E+00	4503880	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
422	13056	25549	1.48	0.0E+00	4503880	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
423	13057	25550	0.95	0.0E+00	4503880	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
424	13058	25551	2.9	0.0E+00	4503880	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
425	13058	25552	1.17	0.0E+00	4503880	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
426	13060	25553	1.68	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-28
426	13060	25554	1.68	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-28
427	13060	25553	2.78	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-28
427	13060	25554	2.78	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-28
431	13064		98.04	0.0E+00	4506808	NT	Homo sapiens ribosomal protein L19 (RPL19) mRNA
445	12674	25130	1.11	0.0E+00	R17785.1	EST_HUMAN	yg08a02.r1 Scores Infant brain 1NIB Homo sapiens cDNA clone IMAGE:31652 5'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
453	13087	25580	1.82	0.0E+00	4503914	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase,
454	13088		20.88	0.0E+00	4506728	NT	phosphoribosylamidoimidazole synthetase (GART) mRNA
455	13089	25581	5.49	0.0E+00	AB028942.1	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
456	13090	25582	10.07	0.0E+00	4507152	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
457	13091	25583	10.07	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
458	13090	25583	10.07	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
457	13091	25584	6.34	0.0E+00	AF163607.1	NT	Mus musculus truncated SON protein (Son) mRNA, complete cds
469	13102		0.81	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
471	13104	25597	2.98	0.0E+00	4557679	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
476	13109		0.92	0.0E+00	AA324262.1	EST_HUMAN	EST127054 Cerebellum II Homo sapiens cDNA 5' end
477	13110		1.1	0.0E+00	BE254447.1	EST_HUMAN	601111520F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3352348 5'
483	13126	25611	4.29	0.0E+00	4504532	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1B (HTR1B) mRNA
493	13126	25612	4.29	0.0E+00	4504532	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1B (HTR1B) mRNA
499	13131	25620	11.34	0.0E+00	4557687	NT	Homo sapiens keratin 18 (KRT18) mRNA
499	13131	25621	11.34	0.0E+00	4557687	NT	Homo sapiens keratin 18 (KRT18) mRNA
509	13142	25627	2.62	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
510	13143	25628	6.1	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
510	13143	25629	5.1	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
519	13151	25634	6.04	0.0E+00	AB033035.1	NT	Homo sapiens mRNA for KIAA1209 protein, partial cds
621	13163	25638	2.12	0.0E+00	AU132868.1	EST_HUMAN	AU132868 NT2RP4 Homo sapiens cDNA clone NT2RP4000837 5'
529	13161	25642	0.27	0.0E+00	BE385144.1	EST_HUMAN	601274951F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3615758 5'
530	15417	25643	1.89	0.0E+00	AW938825.1	EST_HUMAN	PMO-DT0065-130400-002-c06 DT0065 Homo sapiens cDNA
533	13164	25645	1.33	0.0E+00	AL117233.1	NT	Novel human gene mapping to chromosome 1
534	13165	25646	1.42	0.0E+00	8923955	NT	Homo sapiens PC328 protein (PC328), mRNA
538	13169		0.72	0.0E+00	BF373403.1	EST_HUMAN	IL2-FT0159-070800-120-F07 FT0159 Homo sapiens cDNA
545	13178	25656	4.88	0.0E+00	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
552	15418	25660	1.31	0.0E+00	BE081527.1	EST_HUMAN	QV2-BT0635-160400-142-H05 BT0635 Homo sapiens cDNA
558	13187	25665	1.27	0.0E+00	BF028005.1	EST_HUMAN	601764858F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3666988 5'
562	13193	25672	1.12	0.0E+00	AB040909.1	NT	Homo sapiens mRNA for KIAA1478 protein, partial cds
565	13196	25675	14.24	0.0E+00	6006030	NT	Homo sapiens transcription elongation factor B (SIII), polypeptide 1-like (TCCEB1L) mRNA
566	13187	25676	4.05	0.0E+00	4504036	NT	Homo sapiens guanine nucleotide binding protein (G protein), alpha 11 (Gq class) (GNA11) mRNA
568	13197	25677	4.05	0.0E+00	4504036	NT	Homo sapiens guanine nucleotide binding protein (G protein), alpha 11 (Gq class) (GNA11) mRNA
568	13189	25679	1.36	0.0E+00	8923831	NT	Homo sapiens anillin (LOC54443), mRNA
569	13200	25680	0.98	0.0E+00	8923831	NT	Homo sapiens anillin (LOC54443), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
569	13200	25681	0.98	0.0E+00	8923831	NT	Homo sapiens erlinin (LOC54443), mRNA
574	13204		4.55	0.0E+00	AF003528.1	NT	Homo sapiens X-linked arylidic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
582	13212	25680	1.45	0.0E+00	AW135324.1	EST_HUMAN	UI-H-B11-ecb-t-04-0-UI.s1 NCI CGAP Sub3 Homo sapiens cDNA clone IMAGE:2713951 3'
592	13222		6.8	0.0E+00	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
612	13240	25715	4.88	0.0E+00	5174742	NT	Homo sapiens ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1 (UQCRCF1), nuclear gene encoding mitochondrial protein, mRNA
626	13252		6.05	0.0E+00	J04088.1	NT	Human apolipoprotein A-I (ApoA-I) gene, exon 1
628	13255	25729	2.19	0.0E+00	BF104898.1	EST_HUMAN	601822827F1 NIH_MGC_75 Homo sapiens cDNA clone IMAGE:4045447 5'
630	13257	25731	1.8	0.0E+00	8923831	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
630	13257	25732	1.8	0.0E+00	8923831	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
631	13257	25731	1.74	0.0E+00	8923831	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
631	13257	25732	1.74	0.0E+00	8923831	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
632	13257	25731	1.81	0.0E+00	8923831	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
632	13257	25732	1.81	0.0E+00	8923831	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
637	13260	25735	0.98	0.0E+00	4501854	NT	Homo sapiens acetyl-Coenzyme A carboxylase beta (ACACB), mRNA
642	13265	25741	0.94	0.0E+00	AF221712.1	NT	Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
642	13265	25742	0.94	0.0E+00	AF221712.1	NT	Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
650	13273	25750	3.63	0.0E+00	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
652	13275	25753	0.99	0.0E+00	AB037807.1	NT	Homo sapiens mRNA for KIAA1388 protein, partial cds
654	13277	25754	1.8	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
655	13278	25755	2.31	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
655	13278	25756	2.31	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
658	13279	25757	0.73	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
658	13279	25758	0.73	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
663	13287	25768	1.2	0.0E+00	AA399486.1	EST_HUMAN	zf60-c07 r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728732 5'
687	13291	25772	6.55	0.0E+00	D11078.1	NT	Homo sapiens RGH2 gene, retrovirus-like element
671	13295	25775	48.91	0.0E+00	W78811.1	EST_HUMAN	zh51b04.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:415567 5' similar to gb/A21187 ALPHA-2-MACROGLOBULIN PRECURSOR (HUMAN);
671	13295	25776	48.91	0.0E+00	W78811.1	EST_HUMAN	zh51b04.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:415567 5' similar to gb/A21187 ALPHA-2-MACROGLOBULIN PRECURSOR (HUMAN);
674	13298		3.09	0.0E+00	4885528	NT	Homo sapiens novel SH2-containing protein 3 (NSP3) mRNA
681	13305	25788	2.98	0.0E+00	6006003	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2B (GRIN2B) mRNA
683	13307	25791	1.7	0.0E+00	5031624	NT	Homo sapiens CCAAT-box-binding transcription factor (CBF2) mRNA

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688	13310	25786	1.77	0.0E+00	U5235.1	NT	Human neutral amino acid transporter (ASCT1) gene, exon 8
689	13314	25788	0.9	0.0E+00	AF108389.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCa3 (NCX1) mRNA, complete cds
690	13314	25789	0.9	0.0E+00	AF108389.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCa3 (NCX1) mRNA, complete cds
698	13319	25804	4.78	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
698	13319	25805	4.78	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
702	15421		1.23	0.0E+00	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
711	13332	25819	21.02	0.0E+00	4804424	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 1 (HMG1) mRNA
718	13337	25823	5.38	0.0E+00	AB028012.1	NT	Homo sapiens mRNA for KIAA1089 protein, partial cds
726	13346	25838	7.22	0.0E+00	7657498	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
738	13368	25852	87.91	0.0E+00	AA614537.1	EST_HUMAN	np48001.at1 NCL_OGAP_Br1.1 Homo sapiens cDNA clone IMAGE:1128033 3' similar to gb:X57352
742	13362	25856	4.31	0.0E+00	M60675.1	NT	INTERFERON-INDUCIBLE PROTEIN 1-8J (HUMAN);
742	13362	25857	4.31	0.0E+00	M60675.1	NT	Human von Willebrand factor gene, exons 23 through 34
762	13372	25868	1.46	0.0E+00	5032182	NT	Human von Willebrand factor gene, exons 23 through 34
758	13377	25872	4.75	0.0E+00	AF284750.1	NT	Homo sapiens TNF receptor-associated factor 1 (TRAF1) mRNA
758	13377	25873	4.75	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
760	13378	25876	11.52	0.0E+00	11545800	NT	Homo sapiens ALR-like protein mRNA, partial cds
768	13385	25884	2.52	0.0E+00	BE241577.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ21634 (FLJ21634), mRNA
768	13404	25908	1.47	0.0E+00	AF228990.2	NT	TCAAAP1D0779 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAAP0779
768	13404	25909	1.47	0.0E+00	AF228990.2	NT	Homo sapiens MHC class I antigen (HLA-G) mRNA, HLA-G1 allele, complete cds
787	13405	25910	0.72	0.0E+00	AF170492.1	NT	Homo sapiens MHC class I antigen (HLA-G) mRNA, HLA-G1 allele, complete cds
790	13408	25913	19.87	0.0E+00	J03764.1	NT	Homo sapiens chloride channel CLC4 (CLC4) mRNA, complete cds
790	13408	25914	19.87	0.0E+00	J03764.1	NT	Human, plasminogen activator inhibitor-1 gene, exons 2 to 9
793	13411	25915	1.06	0.0E+00	AB037760.1	NT	Human, plasminogen activator inhibitor-1 gene, exons 2 to 9
794	13412	25916	1.82	0.0E+00	6812749	NT	Homo sapiens mRNA for KIAA1339 protein, partial cds
798	15425	25918	2.4	0.0E+00	D30612.1	NT	Homo sapiens zinc finger protein 212 (ZNF212), mRNA
797	13414	25919	3.29	0.0E+00	BE889735.1	EST_HUMAN	Homo sapiens mRNA for repressor protein, partial cds
801	13418	25923	2.87	0.0E+00	RA88915.1	EST_HUMAN	601445647F1 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:384983 5'
802	13419	25924	4.63	0.0E+00	5032088	NT	y69g08.t1 Scores breast 2NblBst Homo sapiens cDNA clone IMAGE:154046 5'
811	13428	25933	1.72	0.0E+00	AB011399.1	NT	Homo sapiens splicing factor 3a, subunit 1, 120KD (SF3A1), mRNA
814	13432	25937	3.26	0.0E+00	7681985	NT	Homo sapiens gene for AF-6, complete cds
825	13442	25949	1.15	0.0E+00	D80006.1	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
825	13442	25950	1.15	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
							Human mRNA for KIAA0184 gene, partial cds

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
830	13447	25954	2.88	0.0E+00	X89772.1	NT	H. sapiens mRNA for interferon alphas/beta receptor (long form)
834	13451	25958	2.77	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
834	13451	25959	2.77	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
839	13455	25965	9.17	0.0E+00	5174478	NT	Homo sapiens pericentriin (PCNT) mRNA
840	13458		8.31	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
857	13473	25986	1.71	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
858	13474	25987	2.81	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
860	13476	25988	2.3	0.0E+00	4557688	NT	Homo sapiens potassium voltage-gated channel, Isk-related family, member 1 (KCNE1) mRNA
868	13481	25995	1.58	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MINBH) mRNA, complete cds
868	13481	25996	1.58	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MINBH) mRNA, complete cds
867	13482	25997	0.95	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MINBH) mRNA, complete cds
872	13487	26002	2.8	0.0E+00	4503654	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (GABPA), mRNA
876	13490	26007	1.98	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
876	13490	26008	1.98	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
883	13497		1.72	0.0E+00	AF027153.1	NT	Homo sapiens sodium/myo-inositol cotransporter (SLC5A3) gene, complete cds
887	13501	26019	6	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
887	13501	26020	6	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
888	13502	26021	12.68	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
889	13503	26022	8.37	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
890	13504	26023	15.55	0.0E+00	4508728	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
894	13508	26026	1.84	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
894	13508	26027	1.84	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
895	13509	26028	2.12	0.0E+00	AA533272.1	EST_HUMAN	U984807.a1 NC1 CGAP_P110 Homo sapiens cDNA clone IMAGE:597453
896	13509	26029	2.12	0.0E+00	AA533272.1	EST_HUMAN	U984807.a1 NC1 CGAP_P110 Homo sapiens cDNA clone IMAGE:597453
896	13510		6.29	0.0E+00	BF677694.1	EST_HUMAN	602085579F1 NIH_MGC 83 Homo sapiens cDNA clone IMAGE:4248915 5'
900	13514	26030	1.87	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
900	13514	26031	1.87	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
901	13515	26032	2.03	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
901	13515	26033	2.03	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
924	13537	26056	0.95	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
931	13544	26061	1.84	0.0E+00	BE088982.1	EST_HUMAN	QV0-B10703-280400-211-g11 B10703 Homo sapiens cDNA
931	13544	26062	1.84	0.0E+00	BE088982.1	EST_HUMAN	QV0-B10703-280400-211-g11 B10703 Homo sapiens cDNA
941	13554	26071	2.92	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
951	13563		32.19	0.0E+00	4504958	NT	Homo sapiens laminin receptor 1 (67kD, ribosomal protein SA) (LAMR1), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
954	13568	26079	6.19	0.0E+00	U35484.1	NT	Human protein C inhibitor (PCI-B) mRNA, complete cds
954	13568	26080	6.19	0.0E+00	U35484.1	NT	Human protein C inhibitor (PCI-B) mRNA, complete cds
956	13563		27.9	0.0E+00	4504958	NT	Homo sapiens lamin receptor 1 (67kD, ribosomal protein SA) (LAMR1), mRNA
957	13568	26082	269.29	0.0E+00	AF089747.1	NT	Homo sapiens alpha-1-antitrypsin precursor, mRNA, partial cds
958	13569	26083	16.83	0.0E+00	S68364.1	NT	protein C inhibitor [human, leukocytes, Genomic, 1216 nt, segment 2 of 5]
958	13569	26084	16.83	0.0E+00	S68364.1	NT	protein C inhibitor [human, leukocytes, Genomic, 1216 nt, segment 2 of 5]
958	13569	26085	16.83	0.0E+00	S68364.1	NT	protein C inhibitor [human, leukocytes, Genomic, 1216 nt, segment 2 of 5]
959	13570	26086	12.58	0.0E+00	L28101.1	NT	Homo sapiens kallistatin (PK4) gene, exons 1-4, complete cds
966	13568	26111	0.9	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end
967	13569	26112	8.4	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end
968	13600	26113	0.6	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end
969	13601	26114	1.26	0.0E+00	4507430	NT	Homo sapiens thymidylate synthase (TS), mRNA
969	13601	26115	1.26	0.0E+00	4507430	NT	Homo sapiens thymidylate synthase (TS), mRNA
967	15430	26122	6.65	0.0E+00	A1001948.1	EST_HUMAN	os98e03.s1 NC1 CGAP_GC3 Homo sapiens cDNA clone IMAGE:1613404 3'
967	15430	26123	6.65	0.0E+00	A1001948.1	EST_HUMAN	os98e03.s1 NC1 CGAP_GC3 Homo sapiens cDNA clone IMAGE:1613404 3'
969	13610	26126	8.95	0.0E+00	7657268	NT	Homo sapiens KIAA0829 protein Mac2 interacting nuclear target (MINT) homolog (KIAA0829), mRNA
1010	13620	26135	2.35	0.0E+00	AB030566.1	NT	Homo sapiens mRNA for PSP24, complete cds
1019	13629	26142	1.56	0.0E+00	BF366974.1	EST_HUMAN	PM2-GN0014-050800-001-f02 GN0014 Homo sapiens cDNA
1019	13629	26143	1.56	0.0E+00	BF366974.1	EST_HUMAN	PM2-GN0014-050800-001-f02 GN0014 Homo sapiens cDNA
1019	13629	26144	1.56	0.0E+00	BF366974.1	EST_HUMAN	PM2-GN0014-050800-001-f02 GN0014 Homo sapiens cDNA
1021	13631	26147	2.54	0.0E+00	X52207.1	NT	Homo sapiens partial c-fgr gene, exons 2 and 3
1021	13631	26148	2.54	0.0E+00	X52207.1	NT	Homo sapiens partial c-fgr gene, exons 2 and 3
1030	13640	26155	2.14	0.0E+00	4757869	NT	Homo sapiens chromodomain protein, Y chromosome-like (CDYL) mRNA
1042	13651	26163	1.69	0.0E+00	U83668.1	NT	Human beta-tubulin (TUBB4q) gene, complete cds
1043	13652	26164	31.97	0.0E+00	U83668.1	NT	Human beta-tubulin (TUBB4q) gene, complete cds
1044	13652	26164	15.2	0.0E+00	U83668.1	NT	Human beta-tubulin (TUBB4q) gene, complete cds
1047	13655		5.72	0.0E+00	AF188460.1	NT	Homo sapiens 8q22.1 region and MTG8 (CBFA2T1) gene, partial cds
1048	13655		7.75	0.0E+00	AF188460.1	NT	Homo sapiens 8q22.1 region and MTG8 (CBFA2T1) gene, partial cds
1052	13658	26170	1.6	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds, and unknown gene
1053	13658	26170	2.85	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds, and unknown gene
1054	13659	26170	2.84	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds, and unknown gene
1055	13660	26171	2.87	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds, and unknown gene
1058	13663	26174	1.69	0.0E+00	7661685	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1062	13667	26178	3.66	0.0E+00	6803114	NT	Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA
1063	13668		2.66	0.0E+00	AA458680.1	EST_HUMAN	aa8907.s1 Stratagene fetal retina 897202 Homo sapiens cDNA clone IMAGE:898236 3' similar to SW-PR58_HUMAN P47210 26S PROTEASE REGULATORY SUBUNIT 8:
1066	13671	26182	0.94	0.0E+00	N43182.1	EST_HUMAN	EST5124_WATM1 Homo sapiens cDNA clone 5124 similar to DNA-DIRECTED RNA POLYMERASE II (alignment Ser and Pro with BLASTx or p)
1066	13671	26183	0.94	0.0E+00	N43182.1	EST_HUMAN	EST5124_WATM1 Homo sapiens cDNA clone 5124 similar to DNA-DIRECTED RNA POLYMERASE II (alignment Ser and Pro with BLASTx or p)
1067	13672	26184	2.11	0.0E+00	4758249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
1067	13672	26185	2.11	0.0E+00	4758249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
1071	13676		2.96	0.0E+00	8922933	NT	Homo sapiens hypothetical protein FLJ11196 (FLJ11196), mRNA
1085	13690	26200	5.51	0.0E+00	4758568	NT	Homo sapiens heat shock 70kD protein 98 (mortalin-2) (HSPA98) mRNA
1103	13707	26215	2.09	0.0E+00	4828872	NT	Homo sapiens cadherin 6, K-cadherin (fetal kidney) (CDH6) mRNA
1103	13707	26216	2.09	0.0E+00	4828872	NT	Homo sapiens cadherin 6, K-cadherin (fetal kidney) (CDH6) mRNA
1107	13711	26220	3.31	0.0E+00	8923824	NT	Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA
1107	13711	26221	3.31	0.0E+00	8923824	NT	Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA
1108	13712	26222	72.04	0.0E+00	AJ245922.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
1110	13714		1.08	0.0E+00	8923087	NT	Homo sapiens hypothetical protein FLJ20080 (FLJ20080), mRNA
1112	13716	26226	4.16	0.0E+00	5174394	NT	Homo sapiens alkylation repair, alkB homolog (ABH), mRNA
1121	13724	26237	4.89	0.0E+00	4758117	NT	Homo sapiens Death associated protein 3 (DAP3) mRNA
1135	13739	26247	2.88	0.0E+00	BE005208.1	EST_HUMAN	MR0-BN0115-200300-003-H08 BN0115 Homo sapiens cDNA
1158	13761	26271	4.25	0.0E+00	7706134	NT	Homo sapiens potassium channel, subfamily K, member 9 (KCNK9), mRNA
1158	13761	26272	4.25	0.0E+00	7706134	NT	Homo sapiens potassium channel, subfamily K, member 9 (KCNK9), mRNA
1171	13773	26282	1.29	0.0E+00	4828947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
1171	13773	26283	1.29	0.0E+00	4828947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
1172	13774	26284	23.49	0.0E+00	4506712	NT	Homo sapiens ribosomal protein S27a (RPS27A) mRNA
1174	13776	26286	1.24	0.0E+00	8923290	NT	Homo sapiens hypothetical protein FLJ20309 (FLJ20309), mRNA
1177	13778	26289	15.95	0.0E+00	AB002050.1	NT	Homo sapiens DNA for Human P20X, complete cds
1179	13781	26290	37.33	0.0E+00	AB002050.1	NT	Homo sapiens DNA for Human P20X, complete cds
1180	13782	26291	6.32	0.0E+00	7857468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
1180	13782	26292	6.32	0.0E+00	7857468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
1184	13785	26295	2.19	0.0E+00	7706500	NT	Homo sapiens Npw38-binding protein Npw38P (LOC51728), mRNA
1185	13786	26296	1.92	0.0E+00	X95828.1	NT	H. sapiens ART4 gene
1185	13786	26297	1.92	0.0E+00	X95828.1	NT	H. sapiens ART4 gene
1188	13787	26298	2.16	0.0E+00	A1147650.1	EST_HUMAN	qb22d10.x1 Scores_pregnant_uterus_Nb4fpu Homo sapiens cDNA clone IMAGE:1687011 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1188	13789	26300	1.69	0.0E+00	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
1197	13788	26309	0.7	0.0E+00	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
1197	13788	26310	0.7	0.0E+00	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
1198	13789	26311	1	0.0E+00	6068944	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
1210	13810	26323	3.09	0.0E+00	7305078	NT	Homo sapiens glutamate decarboxylase 1 (brain, 67kD) (GAD1), transcript variant GAD25, mRNA
1210	13810	26324	3.09	0.0E+00	7305078	NT	Homo sapiens glutamate decarboxylase 1 (brain, 67kD) (GAD1), transcript variant GAD25, mRNA
1213	13813	26327	1.78	0.0E+00	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
1220	13820	26336	8.63	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
1251	13948		0.85	0.0E+00	7657336	NT	Homo sapiens mull. (E. coli) homolog 3 (MLH3), mRNA
1265	13962	26379	0.63	0.0E+00	8022593	NT	Homo sapiens hypothetical protein FLJ10897 (FLJ10897), mRNA
1269	13968	26383	2.13	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1269	13968	26384	2.13	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1270	13967	26385	2.51	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1271	15436	26386	2.03	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1289	13984	26408	6.85	0.0E+00	AF109718.1	NT	Homo sapiens chromosome 3 subtelomeric region
1290	13985	26410	1.33	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
1300	13994	26416	0.83	0.0E+00	4505740	NT	Homo sapiens prefilin 4 (PFND4) mRNA
1309	13903		2.3	0.0E+00	Y18000.1	NT	Homo sapiens NF2 gene
1317	13911	26431	180.44	0.0E+00	4508718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
1324	13918	26440	3.35	0.0E+00	AF084479.1	NT	Homo sapiens Williams-Beuren syndrome deletion transcript 9 (WBSCR9) mRNA, complete cds
1331	13925	26445	1.6	0.0E+00	AB040940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds
1337	13925	26446	1.6	0.0E+00	AB040940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds
1343	13938	26459	2.36	0.0E+00	5174748	NT	Homo sapiens Wolfham syndrome (WFS) mRNA
1343	13938	26460	2.36	0.0E+00	5174748	NT	Homo sapiens Wolfham syndrome (WFS) mRNA
1343	13938	26461	2.36	0.0E+00	5174748	NT	Homo sapiens Wolfham syndrome (WFS) mRNA
1344	13939		2.61	0.0E+00	AF086158.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 5
1354	15438	26473	2.05	0.0E+00	7657529	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
1354	15438	26474	2.05	0.0E+00	7657529	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
1360	13954	26480	4.79	0.0E+00	5803146	NT	Homo sapiens ring finger protein 9 (RNF9), mRNA
1361	13955	26481	1.2	0.0E+00	4508004	NT	Homo sapiens zinc finger protein 173 (ZNF173) mRNA
1363	13957	26482	0.87	0.0E+00	Y07828.2	NT	Homo sapiens RFB30 gene for RING finger protein
1364	13958	26483	4.9	0.0E+00	5803146	NT	Homo sapiens ring finger protein 9 (RNF9), mRNA
1365	13959	26484	1.23	0.0E+00	4508004	NT	Homo sapiens zinc finger protein 173 (ZNF173) mRNA
1367	13961	26488	3.51	0.0E+00	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1368	13682	26487	2.78	0.0E+00	7661866	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1369	13683	26488	4.67	0.0E+00	7661865	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1370	13684	26489	4.11	0.0E+00	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
1370	13684	26490	4.11	0.0E+00	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
1382	13975	26503	1	0.0E+00	M14123.1	NT	Human endogenous retrovirus HERV-K10
1442	14035	26563	0.98	0.0E+00	BE257855.1	EST_HUMAN	601109792F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350471 5'
1442	14035	26564	0.98	0.0E+00	BE257855.1	EST_HUMAN	601109792F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350471 5'
1454	14046	26578	0.92	0.0E+00	AJ250014.1	NT	Homo sapiens mRNA for Familial Cylindromatosis cycl gene
1462	14054	26587	1.2	0.0E+00	AJ208756.1	EST_HUMAN	qg38406.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1837427 3' similar to WP:127A1.5 CE14213:
1463	14055	26588	11.41	0.0E+00	6042208	NT	RAN, member RAS oncogene family/Homo sapiens RAN, member RAS oncogene family (RAN), mRNA
1472	14064	26599	1	0.0E+00	4505649	NT	Homo sapiens proprotein convertase subtilisin/kexin type 2 (PCSK2) mRNA
1472	14064	26600	1	0.0E+00	4505648	NT	Homo sapiens proprotein convertase subtilisin/kexin type 2 (PCSK2) mRNA
1474	14066	26603	3.26	0.0E+00	7705595	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
1474	14066	26604	3.26	0.0E+00	7705595	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
1477	14069	26608	7.19	0.0E+00	AJ238093.1	NT	Homo sapiens partial AF-4 gene, exons 2 to 7 and Alu repeat elements
1488	14081	26620	3.54	0.0E+00	AF038280.1	NT	Homo sapiens alpha1-6glucosyltransferase (alpha1-6GlcT) gene, exon 7
1510	14102	26638	3.27	0.0E+00	AL132868.1	NT	Novel human gene on chromosome 20
1512	14104	26639	1.4	0.0E+00	AL137764.1	NT	Novel human gene mapping to chromosome 1
1518	14108	26644	1.45	0.0E+00	D87077.1	NT	Human mRNA for KIAA0240 gene, partial cds
1518	14111	26647	9.86	0.0E+00	6812457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1521	14113	26649	2.74	0.0E+00	7661865	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1521	14113	26650	2.74	0.0E+00	7661865	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1558	14150	26682	1.6	0.0E+00	7706434	NT	Homo sapiens hHDC for homolog of Drosophila headcase (LOC51688), mRNA
1573	14166	26687	1.46	0.0E+00	AA481172.1	EST_HUMAN	ss34e03.f1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815116 5'
1578	14172	26701	23.87	0.0E+00	AF023860.1	NT	Cercopithecus aethiops cyclophilin A mRNA, complete cds
1578	14172	26702	23.87	0.0E+00	AF023860.1	NT	Cercopithecus aethiops cyclophilin A mRNA, complete cds
1581	14174	26705	1.2	0.0E+00	AW978097.1	EST_HUMAN	EST388206 MAGE resequences, MAGN Homo sapiens cDNA
1581	14174	26706	1.2	0.0E+00	AW978097.1	EST_HUMAN	EST388206 MAGE resequences, MAGN Homo sapiens cDNA
1582	14175	26707	1.02	0.0E+00	D10884.1	NT	Bovine mRNA for neurocalcin
1584	14177		3.89	0.0E+00	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44) and FTP3 (FTP3) genes, complete cds
1585	14178	26710	1.89	0.0E+00	4505404	NT	Homo sapiens transmembrane glycoprotein (GPNMB) mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1585	14178	28711	1.89	0.0E+00	4505404	NT	Homo sapiens transmembrane glycoprotein (GPNMB), mRNA
1586	14179	28712	3.3	0.0E+00	7882405	NT	Homo sapiens KIAA0957 protein (KIAA0957), mRNA
1587	14180		8.58	0.0E+00	7858972	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
1588	14186	28718	8.98	0.0E+00	M88478.1	NT	Human transglutaminase mRNA, complete cds
1589	15445		25.62	0.0E+00	4508854	NT	Homo sapiens ribosomal protein L5 (RPL5), mRNA
1597	14188	28720	28.65	0.0E+00	M14188.1	NT	Human laminin receptor (2H5 epitope) mRNA, 5' end
1609	14202	28735	11.52	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
1617	14210		1.58	0.0E+00	D00333.1	NT	human c-yes-2 gene
1624	14217	28749	10.11	0.0E+00	Z63738.1	NT	H. sapiens H2B/e gene
1625	14218	28750	2.24	0.0E+00	5821480	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1625	14218	28751	2.24	0.0E+00	5821480	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1626	14219	28752	7.63	0.0E+00	AV680831.1	EST_HUMAN	AV680831 GKC Homo sapiens cDNA clone GKCBOF02 5'
1628	14219	28753	7.63	0.0E+00	AV680831.1	EST_HUMAN	AV680831 GKC Homo sapiens cDNA clone GKCBOF02 5'
1628	15448	28754	2.78	0.0E+00	AB040805.1	NT	Homo sapiens mRNA for KIAA1472 protein, partial cds
1632	14224	28755	1.01	0.0E+00	AF157478.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3), mRNA, complete cds
1634	14226	28758	3.22	0.0E+00	7882183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1634	14228	28759	3.22	0.0E+00	7882183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1638	14228	28760	37.34	0.0E+00	5728878	NT	Homo sapiens heat shock 70kD protein 10 (HSC71) (HSPA10), mRNA
1638	14228	28761	37.34	0.0E+00	5728878	NT	Homo sapiens heat shock 70kD protein 10 (HSC71) (HSPA10), mRNA
1638	14230	28763	0.87	0.0E+00	M81803.1	NT	Human sodium channel mRNA
1652	14244	28778	7.35	0.0E+00	H28873.1	EST_HUMAN	yo78c05.st Soares adult brain N2b4HB55Y Homo sapiens cDNA clone IMAGE:183848 3'
1661	14254	28789	1.46	0.0E+00	AB046829.1	NT	Homo sapiens mRNA for KIAA1609 protein, partial cds
1661	14254	28790	1.46	0.0E+00	AB046829.1	NT	Homo sapiens mRNA for KIAA1609 protein, partial cds
1680	14272	28805	0.9	0.0E+00	AW444637.1	EST_HUMAN	UI-H-B3-epw-c-04-0-UJ.st NCJ_CGAP_Sub85 Homo sapiens cDNA clone IMAGE:2733294 3'
1708	14301	28838	0.91	0.0E+00	A1768104.1	EST_HUMAN	wg81b07.x1 Soares NSF F8 9W OT_PA.P S1 Homo sapiens cDNA clone IMAGE:2733294 3'
1709	14302	28839	2.5	0.0E+00	AF057177.1	NT	TR:Q62788 Q62788 CYS2HIS2 ZINC FINGER PROTEIN ;
1713	14305	28843	1.38	0.0E+00	M28580.1	NT	Homo sapiens T-cell receptor gamma V1 gene region
1713	14305	28844	1.38	0.0E+00	M28580.1	NT	Human zinc-finger protein 7 (ZFP7) mRNA, complete cds
1715	14307	28848	6.78	0.0E+00	4557887	NT	Human zinc-finger protein 7 (ZFP7) mRNA, complete cds
1716	14308	28847	0.95	0.0E+00	7857065	NT	Homo sapiens keratin 18 (KRT18) mRNA
1720	14312	28850	0.95	0.0E+00	BE222374.1	EST_HUMAN	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
							hu11d05.x1 NCJ_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3168281 3' similar to TR:Q95147 Q95147 MKP-1 LIKE PROTEIN TYROSINE PHOSPHATASE ;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1720	14312	26851	0.95	0.0E+00	BE222374.1	EST_HUMAN	hu11605.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166281 3' similar to TR:095147 O95147 MKP-1 LIKE PROTEIN TYROSINE PHOSPHATASE ;
1723	14314	26855	3.68	0.0E+00	H30132.1	EST_HUMAN	yo58e08.r1 Soares breast 3Nth-IBst Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M84089 GAMMA-GLUTAMYL TRANSPEPTIDASE 5 PRECURSOR (HUMAN);
1723	14314	26856	3.68	0.0E+00	H30132.1	EST_HUMAN	yo58e08.r1 Soares breast 3Nth-IBst Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M84089 GAMMA-GLUTAMYL TRANSPEPTIDASE 6 PRECURSOR (HUMAN);
1725	14316	26858	6.56	0.0E+00	Z80780.1	NT	H. sapiens H2Bh gene
1725	14316	26859	6.58	0.0E+00	Z80780.1	NT	H. sapiens H2Bh gene
1728	14318		20.47	0.0E+00	5031748	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
1737	14327	26871	4.36	0.0E+00	8823841	NT	Homo sapiens FOXJ2 forkhead factor (LOC55910), mRNA
1742	14332	26877	0.92	0.0E+00	M75880.1	NT	Human hepatocyte growth factor gene, exon 15
1742	14332	26878	0.92	0.0E+00	M75880.1	NT	Human hepatocyte growth factor gene, exon 15
1745	14335	26882	1.17	0.0E+00	4826973	NT	Homo sapiens RNA binding motif protein, Y chromosome, family 1, member A1 (RBM71A1) mRNA
1751	14341	26888	3.78	0.0E+00	AB026542.1	NT	Homo sapiens WAVE2 mRNA for WASP-family protein, complete cds
1753	14343		3.16	0.0E+00	S94400.1	NT	TCR zeta [human, Genomic] mRNA, 365 nt, segment 1 of 8]
1762	14352	26898	1.05	0.0E+00	4557538	NT	Homo sapiens solute carrier family 28 (sulfate transporter), member 2 (SLC28A2) mRNA
1781	14371	26918	2.35	0.0E+00	AF273841.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds
1820	15450		35.11	0.0E+00	4506718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
1825	14414	26900	1.31	0.0E+00	4557556	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
1825	14414	26901	1.31	0.0E+00	4557556	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
1828	14417	26905	1.47	0.0E+00	U63963.1	NT	Human CSF-1 receptor (FMS) gene, complete cds, and (SMF) gene, partial cds
1831	15431	26909	5.45	0.0E+00	4505332	NT	Homo sapiens nuclear autoantigenic sperm protein (histone-binding) (NASP) mRNA
1843	14431	26984	13.62	0.0E+00	U14987.1	NT	Human ribosomal protein L21 mRNA, complete cds
1845	14433	26987	7.44	0.0E+00	AB002331.1	NT	Human mRNA for KIAA0333 gene, partial cds
1848	14434	26988	9.59	0.0E+00	4502284	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4) mRNA
1848	14434	26989	9.59	0.0E+00	4502284	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4) mRNA
1848	14434	26990	9.59	0.0E+00	4502284	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4) mRNA
1857	14445	27001	1.57	0.0E+00	4506328	NT	Homo sapiens protein tyrosine phosphatase, receptor-type, zeta polypeptide 1 (PTPRZ1) mRNA
1863	14450	27008	1.38	0.0E+00	4504628	NT	Homo sapiens Immunoglobulin superfamily, member 3 (IGSF3) mRNA, and translated products
1863	14450	27010	1.38	0.0E+00	4504628	NT	Homo sapiens Immunoglobulin superfamily, member 3 (IGSF3) mRNA, and translated products
1874	14460	27016	7.62	0.0E+00	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1874	14460	27017	7.62	0.0E+00	6005855	NT	Homo sapiens Retine-derived POU-domain factor-1 (RPF-1), mRNA
1884	14470	27027	0.83	0.0E+00	AB032878.1	NT	Homo sapiens mRNA for KIAA1152 protein, partial cds
1884	14470	27028	0.83	0.0E+00	AB032878.1	NT	Homo sapiens mRNA for KIAA1152 protein, partial cds
1888	14473	27030	5	0.0E+00	4828783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
1888	14473	27031	5	0.0E+00	4828783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
1889	14474	27032	8.8	0.0E+00	U07147.1	NT	Human retinal degeneration slow (RDS) gene, exon 1
1889	14474	27033	8.6	0.0E+00	U07147.1	NT	Human retinal degeneration slow (RDS) gene, exon 1
1892	14477	27036	1.32	0.0E+00	AW207280.1	EST_HUMAN	UIH-B11-afn-4-07-Q-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722333 3'
1892	14477	27037	1.32	0.0E+00	AW207280.1	EST_HUMAN	UIH-B11-afn-4-07-Q-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722333 3'
1918	14501	27058	3.38	0.0E+00	BE277465.1	EST_HUMAN	601179164F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3547239 5'
1918	14501	27057	3.38	0.0E+00	BE277465.1	EST_HUMAN	601179164F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3547239 5'
1930	14523	27070	1.77	0.0E+00	BE006282.1	EST_HUMAN	RC2-BN0128-200300-012-504 BN0128 Homo sapiens cDNA
1967	14551	27106	2.82	0.0E+00	4506384	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
1967	14551	27107	2.82	0.0E+00	4506384	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
1975	14559		1.84	0.0E+00	AF157478.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
1978	15455	27116	2.72	0.0E+00	M88478.1	NT	Human transglutaminase mRNA, complete cds
1978	15455	27117	2.72	0.0E+00	M88478.1	NT	Human transglutaminase mRNA, complete cds
1981	14564	27124	1.69	0.0E+00	4507464	NT	Homo sapiens transforming growth factor, beta 3 (TGFB3), mRNA
1981	14564	27125	1.69	0.0E+00	4507464	NT	Homo sapiens transforming growth factor, beta 3 (TGFB3), mRNA
1985	14567		5.68	0.0E+00	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
1990	14572		5.14	0.0E+00	M55632.1	NT	Human topoisomerase I pseudogene 1
1999	14581	27139	3.45	0.0E+00	4809282	NT	Homo sapiens histidine aminonitrilase (HAL) mRNA
1999	14581	27140	3.45	0.0E+00	4809282	NT	Homo sapiens histidine aminonitrilase (HAL) mRNA
2009	14591		0.99	0.0E+00	AL163262.2	NT	Homo sapiens chromosome 21 segment HS21C052
2011	14593	27153	1.13	0.0E+00	8400716	NT	Homo sapiens nebulin (NEB), mRNA
2011	14593	27154	1.13	0.0E+00	8400716	NT	Homo sapiens nebulin (NEB), mRNA
2012	14594	27155	2.07	0.0E+00	4826638	NT	Homo sapiens actinin, alpha 4 (ACTN4) mRNA
2012	14594	27156	2.07	0.0E+00	4826638	NT	Homo sapiens actinin, alpha 4 (ACTN4) mRNA
2024	14606	27171	1.03	0.0E+00	AB018333.1	NT	Homo sapiens mRNA for KIAA0760 protein, partial cds
2024	14608	27172	1.03	0.0E+00	AB018333.1	NT	Homo sapiens mRNA for KIAA0760 protein, partial cds
2030	14612	27178	1.43	0.0E+00	M33782.1	NT	Human TFEB protein mRNA, partial cds

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2030	14612	27177	1.43	0.0E+00	M33762.1	NT	Human TFE3 protein mRNA, partial cds
2032	14614	27178	0.89	0.0E+00	AW183024.1	EST_HUMAN	x69501.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2678913 3'
2032	14614	27179	0.89	0.0E+00	AW183024.1	EST_HUMAN	x69501.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2678913 3'
2033	14615	27180	7.94	0.0E+00	6812457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
2033	14615	27181	7.94	0.0E+00	6812457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
2035	14617	27183	0.88	0.0E+00	AB011148.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
2036	14618	27184	0.82	0.0E+00	Z47556.1	NT	H. sapiens genes for semenogelin I and semenogelin II
2036	14618	27185	0.82	0.0E+00	Z47556.1	NT	H. sapiens genes for semenogelin I and semenogelin II
2043	14625	27184	2.25	0.0E+00	AB040948.1	NT	Homo sapiens mRNA for KIAA1513 protein, partial cds
2097	14676	27245	0.84	0.0E+00	7708742	NT	Homo sapiens TP53/G3a (TP53/G3a), mRNA
2102	14681	27248	2.71	0.0E+00	BE743215.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835198 5'
2102	14681	27250	2.71	0.0E+00	BE743215.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835198 5'
2104	14683	27251	1.39	0.0E+00	4503648	NT	Homo sapiens coagulation factor IX (plasma thromboplastic component, Christmas disease, hemophilia B) (F9) mRNA
2105	14684	27252	3.79	0.0E+00	AU140831.1	EST_HUMAN	AU140831 PLACE4 Homo sapiens cDNA clone IMAGE:400321 5'
2108	14686	26803	1.97	0.0E+00	7705565	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
2108	14686	26804	1.97	0.0E+00	7705565	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
2108	14686	27254	1.89	0.0E+00	AA077589.1	EST_HUMAN	7B22E10 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B22E10
2108	14686	27255	1.59	0.0E+00	AA077589.1	EST_HUMAN	7B22E10 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B22E10
2110	14688		1.76	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
2112	14690		1.76	0.0E+00	4585863	NT	Homo sapiens phosphodiesterase 8A, cGMP-specific, rod, alpha (PDE8A), mRNA
2114	14692		2.2	0.0E+00	A1244247.1	EST_HUMAN	q60008.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:1968871 3' similar to contains Alu repetitive element
2119	14697	27266	2.72	0.0E+00	BE877225.1	EST_HUMAN	601485146F1 NIH_MGC_89 Homo sapiens cDNA clone IMAGE:3887747 5'
2121	14699	27268	1.8	0.0E+00	BF315325.1	EST_HUMAN	601602804F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4135320 5'
2121	14699	27269	1.8	0.0E+00	BF315325.1	EST_HUMAN	601602804F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4135320 5'
2128	14704	27275	2.31	0.0E+00	BE687125.1	EST_HUMAN	RC3-CT0413-270700-022-410 CT0413 Homo sapiens cDNA
2128	14704	27276	2.31	0.0E+00	BE687125.1	EST_HUMAN	RC3-CT0413-270700-022-410 CT0413 Homo sapiens cDNA
2133	14711	27283	2.79	0.0E+00	L00620.1	NT	Human plasma membrane calcium ATPase isoform 2 (APT2B2) mRNA, complete cds
2133	14711	27284	2.79	0.0E+00	L00620.1	NT	Human plasma membrane calcium ATPase isoform 2 (APT2B2) mRNA, complete cds
2134	14712	27285	1.61	0.0E+00	AJ297708.1	NT	Homo sapiens mRNA for CDC2L5 protein kinase, (CDC2L5 gene), isoform 1
2139	14717	27289	1.28	0.0E+00	4759489	NT	Homo sapiens GTP binding protein 1 (GTPBP1) mRNA
2143	14721	27292	34.67	0.0E+00	BE500995.1	EST_HUMAN	7a34c02.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:3220610 3' similar to SW-DTD_HUMAN P50443 SULFATE TRANSPORTER;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2160	14737		2.08	0.0E+00	BE767984.1	EST_HUMAN	QV1-GN0065-140800-318-c10 GN0065 Homo sapiens cDNA
2161	14738		1.8	0.0E+00	AF018983.1	NT	Homo sapiens X-linked juvenile retinoschisis protein (XLRS1) gene, exon 8 and complete cds
2163	14740	27310	3.84	0.0E+00	BF027562.1	EST_HUMAN	601672068F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954785 5'
2165	14742	27311	0.98	0.0E+00	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2168	14743	27312	1.35	0.0E+00	AW752708.1	EST_HUMAN	IL3-CT0219-271699-022-G10 CT0219 Homo sapiens cDNA
2168	14745	27314	6.51	0.0E+00	AI904640.1	EST_HUMAN	QV-BT065-020399-092 BT065 Homo sapiens cDNA
2168	14745	27315	6.51	0.0E+00	AI904640.1	EST_HUMAN	QV-BT065-020399-092 BT065 Homo sapiens cDNA
2202	14778		0.97	0.0E+00	7857252	NT	Homo sapiens potassium large conductance calcium-activated channel, subfamily M, beta member 3-like (KCNMB3L), mRNA
2224	14789		1.37	0.0E+00	L14787.1	NT	Human DNA-binding protein mRNA, 3' end
2230	14805	27377	10.57	0.0E+00	AV738288.1	EST_HUMAN	AV738288 C8 Homo sapiens cDNA clone C8NBDE08 5'
2230	14805	27378	10.57	0.0E+00	AV738288.1	EST_HUMAN	AV738288 C8 Homo sapiens cDNA clone C8NBDE08 5'
2232	14807	27380	1.12	0.0E+00	AA931691.1	EST_HUMAN	cc32a01.s1 NCI_CGAP_Lu6 Homo sapiens cDNA clone IMAGE:1667898 3'
2234	14809		7.75	0.0E+00	M19828.1	NT	Human apolipoprotein B-100 (apoB) gene, exons 22 through 28
2236	14811	27383	10.88	0.0E+00	BF344434.1	EST_HUMAN	802014828F1 NCI_CGAP_Brm64 Homo sapiens cDNA clone IMAGE:4150734 5'
2237	14812	27384	20.34	0.0E+00	BE748899.1	EST_HUMAN	601672186T1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3839012 3'
2240	14815	27387	2.59	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250800-439-b08 TN0141 Homo sapiens cDNA
2240	14815	27388	2.59	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250800-439-b08 TN0141 Homo sapiens cDNA
2244	15461	27393	2.04	0.0E+00	BF313617.1	EST_HUMAN	601800281F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4129622 5'
2247	14821	27396	1.59	0.0E+00	BE018750.1	EST_HUMAN	bb84e02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3049082 5' similar to TR:Q15170 Q15170 TRANSCRIPTION FACTOR S-II-RELATED PROTEIN;
2248	14822	27397	0.94	0.0E+00	AA042813.1	EST_HUMAN	z653cd07.s1 Soares_pregnant_uterus_NibHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X658567 cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMF07E (HUMAN);
2248	14822	27398	0.94	0.0E+00	AA042813.1	EST_HUMAN	z653cd07.s1 Soares_pregnant_uterus_NibHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X658567 cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMF07E (HUMAN);
2256	14830	27406	2.87	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
2256	14830	27407	2.87	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
2257	14831	27408	0.98	0.0E+00	7862401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
2257	14831	27409	0.98	0.0E+00	7862401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
2262	14836		1.58	0.0E+00	U36264.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 16
2263	14837	27414	0.91	0.0E+00	AA282281.1	EST_HUMAN	z12b10.t1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:712891 5'
2270	14844	27420	0.92	0.0E+00	BE897487.1	EST_HUMAN	601432317F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917453 5'
2271	14845		4.79	0.0E+00	M20903.1	NT	Human apolipoprotein C-I pseudogene, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2282	14856	27433	6.28	0.0E+00	4557556	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
2288	14862	27437	1.15	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
2285	14868	27445	1.05	0.0E+00	BE895281.1	EST_HUMAN	601433525F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918607 5'
2289	14872	27448	1.28	0.0E+00	AB037784.1	NT	Homo sapiens mRNA for KIAA1363 protein, partial cds
2338	14870	27482	3.84	0.0E+00	11545748	NT	Homo sapiens differentially expressed in FDCP (mouse homolog) 8 (DEF6), mRNA
2339	14870	27483	3.84	0.0E+00	11545748	NT	Homo sapiens differentially expressed in FDCP (mouse homolog) 8 (DEF6), mRNA
2340	14871	27484	2.08	0.0E+00	A076404.1	EST_HUMAN	cd08c07.x1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1674828 3'
2342	14873	27488	1.81	0.0E+00	AA428001.1	EST_HUMAN	z78a11.1 Soares total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:759740 5'
2342	14873	27487	1.81	0.0E+00	AA428001.1	EST_HUMAN	z78a11.1 Soares total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:759740 5'
2344	14875	27489	1.98	0.0E+00	AA880367.1	EST_HUMAN	z11e12.1 Soares fetal liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:430510 3'
2345	14876	27490	3.85	0.0E+00	BF347038.1	EST_HUMAN	602021846F1 NCJ_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4157339 5'
2350	14821	27489	3.07	0.0E+00	L02840.1	NT	Homo sapiens potassium channel Kv2.1 mRNA, complete cds
2351	14822	27487	1.8	0.0E+00	6325468	NT	Homo sapiens flavin containing monooxygenase 3 (FMO3), mRNA
2358	14828	27503	1.17	0.0E+00	BE676095.1	EST_HUMAN	7722a02.x1 NCJ_CGAP_CL11 Homo sapiens cDNA clone IMAGE:3285370 3' similar to TR:094839 094839 KIAA0957 PROTEIN:
2360	14831	27504	5.89	0.0E+00	AF044571.1	NT	Homo sapiens phosphorylase kinase alpha subunit (PHKA2) gene, exon 32
2361	14832	27505	2.84	0.0E+00	A826542.1	EST_HUMAN	y67c08.x1 NCJ_CGAP_U02 Homo sapiens cDNA clone IMAGE:2283182 3'
2366	14837	27509	1.72	0.0E+00	5803178	NT	Homo sapiens sperm specific antigen 2 (SSFA2), mRNA
2366	14837	27510	1.72	0.0E+00	5803178	NT	Homo sapiens sperm specific antigen 2 (SSFA2), mRNA
2377	14846	27520	0.99	0.0E+00	D83778.1	NT	Human mRNA for KIAA0194 gene, partial cds
2377	14846	27521	0.99	0.0E+00	D83778.1	NT	Human mRNA for KIAA0194 gene, partial cds
2378	14847		1.07	0.0E+00	4557521	NT	Homo sapiens deiodinase, iodothyronine, type I (DIO1) mRNA
2387	14856	27527	2.83	0.0E+00	5174678	NT	Homo sapiens signal regulatory protein, beta, 1 (SIRP-BETA-1) mRNA
2391	14859	27531	1.95	0.0E+00	AU131142.1	EST_HUMAN	AU131142 NT2RP3 Homo sapiens cDNA clone NT2RP3002084 5'
2392	14860		8.95	0.0E+00	BE794028.1	EST_HUMAN	601596843F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3941003 5'
2393	14861	27532	0.98	0.0E+00	AW867076.1	EST_HUMAN	MRT1-SN0033-120400-002-404 SN0033 Homo sapiens cDNA
2394	14862	27533	5.08	0.0E+00	7662017	NT	Homo sapiens KIAA0244 protein (KIAA0244), mRNA
2395	14863	27534	1.69	0.0E+00	4758487	NT	Homo sapiens hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase) (H6PD), mRNA
2395	14863	27535	1.69	0.0E+00	4758487	NT	Homo sapiens hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase) (H6PD), mRNA
2396							Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
2398	14864		3.28	0.0E+00	AF280107.1	NT	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2398	14868	27537	10.16	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2398	14868	27538	10.16	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2398	14988	27639	10.16	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2458	15025	27585	4.3	0.0E+00	AU118582.1	EST_HUMAN	AU118582 HEMBA1 Homo sapiens cDNA clone HEMBA1006156 5'
2459	15026		3.3	0.0E+00	AU042035.1	EST_HUMAN	α80b02.x1 Soares NIH/MPu_S1 Homo sapiens cDNA clone IMAGE:1680683 3' similar to TR:O08862
2460	15027	27598	1.06	0.0E+00	8823820	NT	O08862 230kDA PHOSPHATIDYLINOSITOL 4-KINASE. ; Homo sapiens hypothetical protein FLJ20683 (FLJ20683), mRNA
2463	15030	27598	1.3	0.0E+00	AW303998.1	EST_HUMAN	xv1507.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813221 3' similar to TR:O54024
2465	15032		1.28	0.0E+00	BE885805.1	EST_HUMAN	O54024 EXO84. ;
2476	15043		1.17	0.0E+00	AB005922.1	EST_HUMAN	601432808F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918108 5'
2480	15048	27615	8.35	0.0E+00	6006002	NT	AB005922 HeLa cDNA (T.Noma) Homo sapiens cDNA similar to adenylylate kinase isozyme 2
2484	15049	27619	1.94	0.0E+00	D85606.1	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
2484	15049	27620	1.94	0.0E+00	D85606.1	NT	Homo sapiens gene for cholecystikinin type-A receptor, complete cds
2491	15056	27628	3.24	0.0E+00	AF108275.1	NT	Homo sapiens gene for cholecystikinin type-A receptor, complete cds
2498	15063	27638	3.07	0.0E+00	5729777	NT	Homo sapiens immunoglobulin-like transcript 1c variant 4 (ILT1c) gene, exon 6
2507	15071	27644	4.18	0.0E+00	BF568144.1	EST_HUMAN	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
2518	15082	27655	2.85	0.0E+00	AW468922.1	EST_HUMAN	602184558T1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300383 3'
2520	15084	27658	2.91	0.0E+00	AW501010.1	EST_HUMAN	h604h04.x1 NCI_CGAP_K612 Homo sapiens cDNA clone IMAGE:2872759 3'
2529	15093		1.39	0.0E+00	AL287878.1	EST_HUMAN	UHF-BF0p-cls-c-07-0-U1.1 NIH_MGC_51 Homo sapiens cDNA clone IMAGE:3072780 5'
2537	15101	27674	1.54	0.0E+00	5453965	NT	q23f08.x1 NCI_CGAP_Lym8 Homo sapiens cDNA clone IMAGE:1882435 3' similar to contains element
2537	15101	27675	1.54	0.0E+00	5453965	NT	MIR repetitive element ;
2548	15112		1.81	0.0E+00	AW813853.1	EST_HUMAN	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA
2552	15116	27688	9.72	0.0E+00	BE795542.1	EST_HUMAN	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA
2553	15117	27687	1.32	0.0E+00	BF509482.1	EST_HUMAN	RC3-ST0197-300300-016-c04 ST0197 Homo sapiens cDNA
2555	15119	27689	1.52	0.0E+00	Z32894.2	NT	601502530F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3046518 5'
2557	15121		3.57	0.0E+00	5453871	NT	UHF-B14-ec2-b-08-0-U1.1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086535 3'
2559	15123	27692	0.89	0.0E+00	BE910378.1	EST_HUMAN	Homo sapiens mRNA for membrane transport protein (XK gene)
2560	15124	27693	3.1	0.0E+00	7657488	NT	Homo sapiens platelet-derived growth factor receptor-like (PDGFR) mRNA
2561	15125	27694	3.58	0.0E+00	BE150885.1	EST_HUMAN	Homo sapiens platelet-derived growth factor receptor-like (PDGFR) mRNA
2562	15126	27695	1.24	0.0E+00	8823340	NT	601503356F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3905148 5'
2563	15127	27696	3	0.0E+00	U83238.1	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L), mRNA
2568	15132	27700	1.34	0.0E+00	BE888490.1	EST_HUMAN	RC4-H10276-180200-013-005 HT0276 Homo sapiens cDNA
2571	15134	27704	4.84	0.0E+00	BE875511.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ20368 (FLJ20368), mRNA
2571	15134	27705	4.84	0.0E+00	BE875511.1	EST_HUMAN	Human Sec-62 (Sec62) mRNA, complete cds
2571	15134	27705	4.84	0.0E+00	BE875511.1	EST_HUMAN	601508211F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3906886 5'
2571	15134	27705	4.84	0.0E+00	BE875511.1	EST_HUMAN	601489241F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3891371 5'
2571	15134	27705	4.84	0.0E+00	BE875511.1	EST_HUMAN	601489241F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3891371 5'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2587	15150	27714	0.9	0.0E+00	BE536921.1	EST_HUMAN	601064738F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3451161 5'
2582	15154	27721	9.34	0.0E+00	AU143277.1	EST_HUMAN	AU143277 Y79AA1 Homo sapiens cDNA clone Y79AA1001873 5'
2582	15154	27722	9.34	0.0E+00	AU143277.1	EST_HUMAN	AU143277 Y79AA1 Homo sapiens cDNA clone Y79AA1001873 5'
2583	15155	27723	0.9	0.0E+00	BE282896.1	EST_HUMAN	601105312F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887955 5'
2583	15155	27724	0.9	0.0E+00	BE282896.1	EST_HUMAN	601105312F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887955 5'
2586	15158	27728	8.62	0.0E+00	AF245505.1	NT	Homo sapiens adiccan mRNA, complete cds
2633	15402	27768	1.78	0.0E+00	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
2633	15402	27767	1.78	0.0E+00	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
2634	15194		3.12	0.0E+00	BF513835.1	EST_HUMAN	UIH-BW1-emp-f-12-0-JL.s1 NCI_OGAP_Sub7 Homo sapiens cDNA clone IMAGE:3070831 3'
2643	15202	27775	1.24	0.0E+00	AI571737.1	EST_HUMAN	In19008.x1 NCI_OGAP_Bn26 Homo sapiens cDNA clone IMAGE:2188055 3' similar to gb:L20977 CALCIUM-TRANSPORTING ATPASE PLASMA MEMBRANE, BRAIN ISOFORM 2 (HUMAN);
2644	15203	27776	2.06	0.0E+00	5032150	NT	Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, 1, 28kD (TAF21) mRNA
2647	15206	27778	6.91	0.0E+00	AB037859.1	NT	Homo sapiens mRNA for KIAA1438 protein, partial cds
2648	15207	27780	0.98	0.0E+00	BE795445.1	EST_HUMAN	601590108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944304 5'
2648	15207	27781	0.98	0.0E+00	BE795445.1	EST_HUMAN	601590108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944304 5'
2651	15210	27782	1.16	0.0E+00	BE283328.1	EST_HUMAN	601143722F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3051389 5'
2655	15214		5.98	0.0E+00	BE792472.1	EST_HUMAN	601584930F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3938222 5'
2663	15221	27793	1.73	0.0E+00	4504688	NT	Homo sapiens IMP (inosine monophosphate) dehydrogenase 1 (IMPDH1) mRNA
2671	15228		1.65	0.0E+00	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
2672	15230	27800	6.98	0.0E+00	AF173227.1	NT	Homo sapiens guanylate cyclase-activating protein 2 (GUCA1B) gene, exon 1
2676	15234	27801	2.16	0.0E+00	AB011108.1	NT	Homo sapiens mRNA for KIAA0536 protein, partial cds
2680	15238	27805	1.01	0.0E+00	AU130403.1	EST_HUMAN	AU130403 NT2RP3 Homo sapiens cDNA clone NT2RP3000779 5'
2680	15238	27806	1.01	0.0E+00	AU130403.1	EST_HUMAN	AU130403 NT2RP3 Homo sapiens cDNA clone NT2RP3000779 5'
2682	15240	27808	1.22	0.0E+00	AW887016.1	EST_HUMAN	RC1-O10086-220300-011-407 OT0088 Homo sapiens cDNA
2685	15243	27811	3.43	0.0E+00	BE383165.1	EST_HUMAN	601288714F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3628923 5'
2686	15244		2.17	0.0E+00	BE531263.1	EST_HUMAN	601278373F1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3610267 5'
2712	15266	27837	1.4	0.0E+00	8922843	NT	Homo sapiens hypothetical protein FLJ11052 (FLJ11052), mRNA
2748	15303		9.58	0.0E+00	AA318723.1	EST_HUMAN	EST188414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L28
2749	15304	27868	12.57	0.0E+00	BE794884.1	EST_HUMAN	601586825F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943591 5'
2765	15310	27876	2.37	0.0E+00	U38253.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 5
2757	15312	27878	0.97	0.0E+00	7668517	NT	Homo sapiens neuregulin 1 (NRG1),transcript variant SMDF, mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2758	15313	27879	1.42	0.0E+00	AF110783.1	NT	Homo sapiens skeletal muscle LIM-protein 1 (FHL1) gene, complete cds
2760	15315	27881	1.23	0.0E+00	AB051826.1	NT	Homo sapiens IG28K mRNA for GTP-binding protein like 1, complete cds
2765	15319	27885	20.41	0.0E+00	BE786378.1	EST_HUMAN	601581891F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3845683 5'
2768	15320	27888	2.11	0.0E+00	BF680632.1	EST_HUMAN	602155923F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4287132 5'
2769	15476	27890	14.33	0.0E+00	BE569433.1	EST_HUMAN	601335485F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3688584 5'
2770	15323		1.77	0.0E+00	AV721647.1	EST_HUMAN	AV721647 HTB Homo sapiens cDNA clone HTB88YE08 5'
2772	15325	27893	2.47	0.0E+00	5174486	NT	Homo sapiens spermatogenesis associated PD1 (KIAA0757) mRNA
2772	15325	27894	2.47	0.0E+00	5174486	NT	Homo sapiens spermatogenesis associated PD1 (KIAA0757) mRNA
2773	15326	27895	1.25	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
2773	15328	27896	1.25	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
2774	15327	27897	2.27	0.0E+00	AF280185.1	NT	Homo sapiens hypertension-related calcium-regulated gene mRNA, complete cds
2775	15328		131.05	0.0E+00	AV651066.1	EST_HUMAN	AV651066 GLC Homo sapiens cDNA clone GLCCLD07 3'
2776	15329	27898	4.94	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250300-439-508 TN0141 Homo sapiens cDNA
2776	15329	27899	4.94	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250300-439-508 TN0141 Homo sapiens cDNA
2780	15333	27902	7.42	0.0E+00	4757983	NT	Homo sapiens cerebellar degeneration-related protein (34KD) (CDR1) mRNA
2780	15333	27903	7.42	0.0E+00	4757983	NT	Homo sapiens cerebellar degeneration-related protein (34KD) (CDR1) mRNA
2784	15337	27908	3.11	0.0E+00	BE747193.1	EST_HUMAN	601580903F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928472 5'
2790	15349		0.98	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
2797	15350	27919	2.78	0.0E+00	BF514110.1	EST_HUMAN	U1-H-BW1-armw-e-07-0-U1.s1 NCJ_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071340 3'
2804	15358		0.88	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
2809	15361	27928	1.76	0.0E+00	7705275	NT	Homo sapiens angiotensin-3 (ANG-3), mRNA
2809	15361	27929	1.76	0.0E+00	7705275	NT	Homo sapiens angiotensin-3 (ANG-3), mRNA
2810	15362	27930	4.3	0.0E+00	BF877694.1	EST_HUMAN	602085578F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248816 5'
2814	15368	27936	1.1	0.0E+00	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA
2817	15369	27938	17.28	0.0E+00	AV725534.1	EST_HUMAN	AV725534 HTC Homo sapiens cDNA clone HTCCCA03 5'
2817	15369	27939	17.28	0.0E+00	AV725534.1	EST_HUMAN	AV725534 HTC Homo sapiens cDNA clone HTCCCA03 5'
2819	15371		9.44	0.0E+00	AB78183.1	EST_HUMAN	au55d04.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2518663 5' similar to
2822	15374	27944	1.69	0.0E+00	BF530661.1	EST_HUMAN	SW_R13A_HUMAN_P40428 60S RIBOSOMAL PROTEIN L13A :
2823	15375	27945	7.68	0.0E+00	BE872768.1	EST_HUMAN	602071957F1 NCJ_CGAP_Bn67 Homo sapiens cDNA clone IMAGE:4214679 5'
2825	15377	27946	1.55	0.0E+00	AU131494.1	EST_HUMAN	601450812F1 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:3854842 5'
2825	15377	27947	1.55	0.0E+00	AU131494.1	EST_HUMAN	AU131494 NT2RP3 Homo sapiens cDNA clone NT2RP3002672 5'
2826	15378	27948	34.11	0.0E+00	BE300344.1	EST_HUMAN	AU131494 NT2RP3 Homo sapiens cDNA clone NT2RP3002672 5'
2826	15378	27949	34.11	0.0E+00	BE300344.1	EST_HUMAN	600944794F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2960808 5'
2826	15378	27949	34.11	0.0E+00	BE300344.1	EST_HUMAN	600944794F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2960808 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2832	12861	25345	7.88	0.0E+00	S78830.1	NT	glycoprotein D=Duffy group antigen [human, blood, Genomic DNA, 3088 nt]
2835	15385		1.75	0.0E+00	AB033281.1	NT	Homo sapiens BTRCP2 mRNA for F-box and WD-repeats protein isoform C, complete cds
2841	13382	25881	1.88	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
2841	13382	25882	1.88	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
2846	13882	26192	3.33	0.0E+00	4503202	NT	Homo sapiens cytochrome P450, subfamily I (dioxin-inducible), polypeptide 1 (glaucoma 3, primary infantile) (CYP1B1) mRNA
2846	13882	26183	3.33	0.0E+00	4503202	NT	Homo sapiens cytochrome P450, subfamily I (dioxin-inducible), polypeptide 1 (glaucoma 3, primary infantile) (CYP1B1) mRNA
2861	15480	27856	4.7	0.0E+00	X85880.1	NT	H. sapiens serine hydroxymethyltransferase pseudogene
2862	15481		2.28	0.0E+00	AF068824.1	NT	Homo sapiens 5-aminolevulinic acid synthase 2 (ALAS2) gene, complete cds
2863	15482		1.63	0.0E+00	AB040860.1	NT	Homo sapiens mRNA for KIAA1527 protein, partial cds
2870	15488		1.06	0.0E+00	AJ238852.1	NT	Homo sapiens partial rpl3 gene for ribosomal protein L3, U82 snRNA, U83a snRNA and U83b snRNA genes
2871	15489	27860	2.43	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
2875	15493	27863	1.55	0.0E+00	M80902.1	NT	Human A1-HNAK nucleoprotein mRNA, 5' end
2877	15495	27865	1.25	0.0E+00	BE154504.1	EST_HUMAN	PM40-HT0343-281289-003-e02 HT0343 Homo sapiens cDNA
2877	15495	27868	1.26	0.0E+00	BE154504.1	EST_HUMAN	PM40-HT0343-281289-003-e02 HT0343 Homo sapiens cDNA
2878	15497		1	0.0E+00	X73428.1	NT	H. sapiens k43 gene for HLH type transcription factor
2881	15499		2.76	0.0E+00	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
2882	15500	27869	1.01	0.0E+00	7019584	NT	Homo sapiens zinc finger protein 221 (ZNF221), mRNA
2882	15500	27870	1.01	0.0E+00	7019584	NT	Homo sapiens zinc finger protein 221 (ZNF221), mRNA
2882	15500	27871	1.01	0.0E+00	7019584	NT	Homo sapiens zinc finger protein 221 (ZNF221), mRNA
2884	15502	27872	2.39	0.0E+00	M88478.1	NT	Human transglutaminase mRNA, complete cds
2888	15505	27875	15.68	0.0E+00	D50657.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTG3) pseudogene
2888	15505	27876	15.68	0.0E+00	D50657.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTG3) pseudogene
2891	15508	27879	1.95	0.0E+00	AL096857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
2892	15509		7.43	0.0E+00	Y10658.1	NT	H. sapiens mRNA for nuclear DNA helicase II
2893	15510		1.17	0.0E+00	AF152303.1	NT	Homo sapiens protocadherin alpha C1 (PCDH-alpha-C1) mRNA, complete cds
2894	15511	27880	112.87	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2894	15511	27881	112.87	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2904	15521	27881	2.68	0.0E+00	4507280	NT	Homo sapiens serine/threonine kinase 8 (STK9) mRNA
2907	15524	27895	1.03	0.0E+00	AL047590.1	EST_HUMAN	DKFZp586G0821_r1 586 (synonym: huter1) Homo sapiens cDNA clone DKFZp586G0821
2908	15525	27896	1.64	0.0E+00	7661883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
2908	15525	27897	1.64	0.0E+00	7661883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2800	15528		2.8	0.0E+00	4503088	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
2812	15529	27989	6.04	0.0E+00	BE081898.1	EST_HUMAN	QV2-BT0638-130400-138-H03 BT0638 Homo sapiens cDNA
2812	15529	28000	6.04	0.0E+00	BE081898.1	EST_HUMAN	QV2-BT0638-130400-138-H03 BT0638 Homo sapiens cDNA
2818	15535	28008	0.71	0.0E+00	6806818	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
2818	15535	28008	0.71	0.0E+00	6806818	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
2821	15538	28013	2.25	0.0E+00	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C006
2821	15538	28014	2.25	0.0E+00	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C006
2822	15539	28015	1.29	0.0E+00	AA215579.1	EST_HUMAN	z98b11.s1 NCI_CGAP_G081 Homo sapiens cDNA clone IMAGE:683517 3' similar to contains Alu repetitive element
2828	15545		4.1	0.0E+00	Y19210.1	NT	Homo sapiens H1b5 gene for hair keratin, exons 1 to 9
2832	15548	28024	1.24	0.0E+00	4758279	NT	Homo sapiens EphA4 (EPHA4) mRNA
2834	15550	28027	41.84	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2836	15552	28028	1.85	0.0E+00	P52740	SWISSPROT	ZINC FINGER PROTEIN 132
2837	15553	28030	1.25	0.0E+00	AF152398.1	NT	Homo sapiens protocadherin gamma C4 (PCDH-gamma-C4) mRNA, complete cds
2846	15562	28037	0.92	0.0E+00	AI209084.1	EST_HUMAN	qp49f04.x1 Soares_beds_NHT Homo sapiens cDNA clone IMAGE:1838527 3' similar to SW:CB20_HUMAN P52268 20 KD NUCLEAR CAP BINDING PROTEIN ;
2854	15570	28045	1.78	0.0E+00	AB033083.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
2854	15570	28046	1.78	0.0E+00	AB033083.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
2855	15571	28047	6.84	0.0E+00	AB040841.1	NT	Homo sapiens mRNA for KIAA1508 protein, partial cds
2855	15571	28048	6.84	0.0E+00	AB040841.1	NT	Homo sapiens mRNA for KIAA1508 protein, partial cds
2858	15574	28051	3.14	0.0E+00	7661803	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
2858	15574	28052	3.14	0.0E+00	7661803	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
2868	15575	28053	3.48	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLL.T4) mRNA
2869	15575	28054	3.48	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLL.T4) mRNA
2884	15579	28056	1.12	0.0E+00	BF110702.1	EST_HUMAN	7n40d03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3587028 3' similar to TR:Q8VLN1
2884	15579	28059	1.12	0.0E+00	BF110702.1	EST_HUMAN	7n40d03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3587028 3' similar to TR:Q8VLN1
2872	15588	28070	2.96	0.0E+00	4505084	NT	Q8VLN1 CG17283 PROTEIN ;
2872	15588	28071	2.96	0.0E+00	4505084	NT	Homo sapiens melanoma antigen, family B, 4 (MAGEB4), mRNA
2881	15587	28077	1.82	0.0E+00	4768827	NT	Homo sapiens melanoma antigen, family B, 4 (MAGEB4), mRNA
2885	15601	28080	1.33	0.0E+00	X15308.1	NT	Homo sapiens neuroxin III (NRXN3) mRNA
							H. sapiens NF-H gene, exon 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2885	15601	28081	1.33	0.0E+00	X15309.1	NT	H. sapiens NF-H gene, exon 4
2887	15603	28083	9.28	0.0E+00	AF108275.1	NT	Homo sapiens immunoglobulin-like transcript 1c variant 4 (ILT1c) gene, exon 6
3001	15617		1.28	0.0E+00	A1148880.1	EST_HUMAN	qf4309.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752809 3'
3009	15625	28103	0.72	0.0E+00	AF281074.1	NT	Homo sapiens neuropilin 2 (NRP2) gene, complete cds, alternatively spliced
3009	15625	28104	0.72	0.0E+00	AF281074.1	NT	Homo sapiens neuropilin 2 (NRP2) gene, complete cds, alternatively spliced
3010	15626	28105	1.24	0.0E+00	4506118	NT	Homo sapiens prospero-related homeobox 1 (PROX1) mRNA
3011	15627	28106	2.29	0.0E+00	AB004884.1	NT	Homo sapiens mRNA for PKU-alpha, partial cds
3023	15639	28116	1.93	0.0E+00	7682273	NT	Homo sapiens KIAA0737 gene product (KIAA0737), mRNA
3025	15641	28118	2.52	0.0E+00	5728755	NT	Homo sapiens calcium channel, voltage-dependent, gamma subunit 3 (CACNG3), mRNA
3025	15641	28119	2.52	0.0E+00	5728755	NT	Homo sapiens calcium channel, voltage-dependent, gamma subunit 3 (CACNG3), mRNA
3038	15652	28130	1.45	0.0E+00	AF114488.1	NT	Homo sapiens calcium channel, voltage-dependent, gamma subunit 3 (CACNG3), mRNA
3036	15652	28131	1.45	0.0E+00	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
3060	15676		0.73	0.0E+00	AL163246.2	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
3062	15678	28162	1.4	0.0E+00	M74099.1	NT	Homo sapiens chromosome 21 segment HS21C046
3072	15687	28158	0.72	0.0E+00	4506882	NT	Human displacement protein (CCAT) mRNA
3075	15690	28163	0.66	0.0E+00	AW978268.1	EST_HUMAN	Homo sapiens semenogelin I (SEMG1) mRNA
3080	15695		3.98	0.0E+00	AF195663.1	NT	EST388375 MAGE resequences, MAGN Homo sapiens cDNA
3083	15698	28171	20.17	0.0E+00	5579469	NT	Homo sapiens membrane-bound aminopeptidase P (XNPEP2) gene, complete cds
3083	15698	28172	20.17	0.0E+00	5579469	NT	Homo sapiens heat shock 70kD protein 1 (HSPA1A), mRNA
3085	15700		7.12	0.0E+00	AL369403.1	NT	Homo sapiens heat shock 70kD protein 1 (HSPA1A), mRNA
3089	15704	28176	2.79	0.0E+00	AF017433.1	NT	Isoform 2 of a novel human mRNA from chromosome 22
							Homo sapiens putative transcription factor CR53 (CR53) mRNA, partial cds
							Homo sapiens transcription factor KCHM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 8, and synaptophysin genes, complete cds; and L-type calcium channel α
3082	15707		2.38	0.0E+00	AF196778.1	NT	
3112	15727	28188	3.45	0.0E+00	X03529.1	NT	Human germline gene 10.1 for Ig lambda L-chain C region (Ig-L-C10.1)
3118	15732		1.60	0.0E+00	AF190355.1	NT	Homo sapiens F-box protein FBL5 (FBL5) mRNA, complete cds
3122	15738	28205	1.74	0.0E+00	AF084593.1	NT	Homo sapiens melanoma-associated antigen (MAGE-C1) gene, complete cds
3140	15754	28221	3.56	0.0E+00	AF265208.1	NT	Homo sapiens SWI-SNF complex protein p270 mRNA, partial cds
3141	15755	28222	5.25	0.0E+00	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
3146	15760	28226	4.35	0.0E+00	7682139	NT	Homo sapiens KIAA0469 gene product (KIAA0469), mRNA
3147	15761	28227	1.46	0.0E+00	AF042075.1	NT	Homo sapiens olfactory receptor-like protein (OLFR 42B) gene, OLFR 42B-9110 allele, partial cds
3175	15798	28260	3.49	0.0E+00	4826783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
3185	15797	28269	48.14	0.0E+00	L20941.1	NT	Human ferritin heavy chain mRNA, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3188	15800	28272	2.08	0.0E+00	AB011121.1	NT	Homo sapiens mRNA for KIAA0549 protein, partial cds
3188	15800	28273	2.08	0.0E+00	AB011121.1	NT	Homo sapiens mRNA for KIAA0549 protein, partial cds
3188	15808	28281	18.48	0.0E+00	T94870.1	EST_HUMAN	ye32303.s1 Stratiogene lung (#937210) Homo sapiens cDNA clone IMAGE:119453 3' similar to SP:S29539
3210	15822	28288	1.23	0.0E+00	BF243336.1	EST_HUMAN	S29539 BASIC PROTEIN, 23K -
3211	15823	28289	1.28	0.0E+00	A1988086.1	EST_HUMAN	601678507F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4107433 5'
3216	15828	28306	4.69	0.0E+00	X98922.1	NT	wu12h10.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2516903 3'
3216	15828	28307	4.69	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
							H. sapiens mRNA for gamma-glutamyltransferase
3218	15830	28309	0.63	0.0E+00	A1985950.1	EST_HUMAN	tu38g09.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2253376 3' similar to SW:RASD_DICD1
3226	15838	28317	1.57	0.0E+00	4758827	NT	PC3967 RAS-LIKE PROTEIN RASD
3226	15838	28318	1.57	0.0E+00	4758827	NT	Homo sapiens neuridin III (NRXN3) mRNA
3233	15845	28325	10.75	0.0E+00	4504858	NT	Homo sapiens neuridin III (NRXN3) mRNA
3234	15846	28326	0.92	0.0E+00	4507720	NT	Homo sapiens interleukin 1 receptor, type I (IL1R1) mRNA
3234	15846	28327	0.92	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
3245	15857	28340	1	0.0E+00	AJ277892.1	NT	Homo sapiens titin (TTN) mRNA
3253	15865	28346	2.88	0.0E+00	M28688.1	NT	Homo sapiens partial TTN gene for titin
							Homo sapiens nuclear phosphoprotein B23 (NPM1) mRNA, complete cds
3257	15869	28349	2.27	0.0E+00	4502098	NT	Homo sapiens solute carrier family 25 (mitochondrial carrier, adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
3263	15876	28357	0.96	0.0E+00	4758055	NT	Homo sapiens CREB binding protein (Rubinstein-Taybi syndrome) (CREBBP) mRNA
3263	15875	28358	0.96	0.0E+00	4758055	NT	Homo sapiens CREB binding protein (Rubinstein-Taybi syndrome) (CREBBP) mRNA
3265	15877	28359	4.57	0.0E+00	AA774783.1	EST_HUMAN	sa87b11.s1 Stratiogene schizo brain S11 Homo sapiens cDNA clone IMAGE:971133 3'
3273	15885	28367	4.14	0.0E+00	AF286508.1	NT	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
3273	15885	28368	4.14	0.0E+00	AF286508.1	NT	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
3285	15888	28374	1.44	0.0E+00	4557580	NT	Homo sapiens fibrillin 1 (Marfan syndrome) (FBN1) mRNA
3292	15903	28383	1.09	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
3300	15911		0.96	0.0E+00	M85188.1	NT	Human connexin 43 processed pseudogene
							Homo sapiens HLA class III region containing tenascin X (tenascin-X) gene, partial cds; cytochrome P450 21-hydroxylase (CYP21B), complement component C4 (C4B) G11, hepcase (SKL2W), RD, complement factor B (Bf), and complement component C2 (C2) genes.>
3301	15912	28390	1.7	0.0E+00	AF019413.1	NT	Homo sapiens very large G-protein coupled receptor-1 (VLGR1) mRNA, complete cds
3303	15914	28392	4.47	0.0E+00	AF055084.1	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1) mRNA
3313	18001	28400	2.26	0.0E+00	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1) mRNA
3313	18001	28401	2.26	0.0E+00	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1) mRNA
3329	15939	28415	2.57	0.0E+00	AF285208.1	NT	Homo sapiens SWI-SNF complex protein p270 mRNA, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3330	15940	28416	1.66	0.0E+00	8923624	NT	Homo sapiens hypothetical protein FLJ20895 (FLJ20895), mRNA
3335	15963	28440	1.02	0.0E+00	4893312	NT	Homo sapiens G protein-coupled receptor 24 (GPR24), mRNA
3368	15974	28451	5.6	0.0E+00	A1588294.1	EST_HUMAN	t5808.x2 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2222535 3' similar to SW:RL11_RAT
3369	15977	28454	1.4	0.0E+00	AW955400.1	EST_HUMAN	P25121 80S RIBOSOMAL PROTEIN L11, contains Alu repetitive element
3374	15983	28460	2.28	0.0E+00	AF128893.1	NT	EST367470 MAGS resequences, MAGD Homo sapiens cDNA
3374	15983	28461	2.28	0.0E+00	AF128893.1	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-6
3375	15984	28462	0.91	0.0E+00	7657213	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-6
3375	15984	28463	0.91	0.0E+00	7657213	NT	Homo sapiens homonally upregulated neu tumor-associated kinase (HUNK), mRNA
3378	15987	28465	1.23	0.0E+00	4502582	NT	Homo sapiens homonally upregulated neu tumor-associated kinase (HUNK), mRNA
3378	15987	28466	1.23	0.0E+00	4502582	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3382	15991	28469	13.03	0.0E+00	AF111103.1	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3384	15993	28471	0.80	0.0E+00	AB040940.1	NT	Homo sapiens pyrin (MEPV) gene, complete cds
3403	16012	28481	1.08	0.0E+00	A1632569.1	EST_HUMAN	Homo sapiens mRNA for KIAA1507 protein, partial cds
3443	16051	28529	3.18	0.0E+00	AU123684.1	EST_HUMAN	wb1004.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2305279 3' similar to TR:Q81928 Q81929 ZINC FINGER PROTEIN.
3450	16057	28532	0.94	0.0E+00	7363436	NT	AU123684 NTZRM2 Homo sapiens cDNA clone NTZRM2000735 5'
3450	16057	28533	0.94	0.0E+00	7363436	NT	Homo sapiens difactory receptor, family 10, subfamily C, member 1 (OR10C1), mRNA
3453	16060	28535	1.88	0.0E+00	7706239	NT	Homo sapiens difactory receptor, family 10, subfamily C, member 1 (OR10C1), mRNA
3454	16061	28536	1.04	0.0E+00	AF211188.1	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594), mRNA
3458	16065	28560	1.03	0.0E+00	AW867015.1	EST_HUMAN	Homo sapiens T-type calcium channel alpha1 subunit Alpha1-a isoform (CACNA1I) mRNA, complete cds
3471	16077	28551	1.28	0.0E+00	7682401	NT	MR1-SN0033-100400-001-c08 SN0033 Homo sapiens cDNA
3472	16078	28552	1.05	0.0E+00	4502398	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
3475	16081	28554	1.72	0.0E+00	5803067	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
3484	15313	27878	1.96	0.0E+00	AF110763.1	NT	Homo sapiens beaded filament structural protein 1, filensin (BFSP1) mRNA
3489	16094	28567	2.36	0.0E+00	7657038	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 2 (ILRA2), mRNA
3490	16095	28568	0.97	0.0E+00	5453965	NT	Homo sapiens skeletal muscle LIM-protein 1 (FHL1) gene, complete cds
3490	16095	28569	0.97	0.0E+00	5453965	NT	Homo sapiens death receptor 6 (DR6), mRNA
3493	16098	28573	5.92	0.0E+00	K02380.1	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA
3495	16100	28575	1.2	0.0E+00	7427522	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3497	16102	28577	1	0.0E+00	4557746	NT	Homo sapiens met proto-oncogene (hepatocyte growth factor receptor) (MET) mRNA
3501	16106	28581	3.89	0.0E+00	A835158.1	EST_HUMAN	wp14d10.x1 NCL_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2464819 3' similar to TR:O73634 O73634 NEURAL CELL ADHESION MOLECULE ;
3501	16106	28582	3.89	0.0E+00	A835158.1	EST_HUMAN	wp14d10.x1 NCL_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2464819 3' similar to TR:O73634 O73634 NEURAL CELL ADHESION MOLECULE ;
3505	16110	28587	2.13	0.0E+00	AJ278120.1	NT	Homo sapiens mRNA for putative ankyrin-repeat containing protein (ORF1)
3508	16111	28588	1.12	0.0E+00	7706378	NT	Homo sapiens ASB-4 protein (LOC51688), mRNA
3512	16117	28598	2.09	0.0E+00	6552332	NT	Homo sapiens v-fos FBJ murine osteosarcoma viral oncogene homolog (FOS), mRNA
3512	16117	28597	2.09	0.0E+00	6552332	NT	Homo sapiens v-fos FBJ murine osteosarcoma viral oncogene homolog (FOS), mRNA
3518	16123	28603	1.4	0.0E+00	M14123.1	NT	Human endogenous retrovirus HERV-K10
3523	16128	28608	6.45	0.0E+00	U43283.1	NT	Human MDS1A (AML1/MDS1 fusion) mRNA, partial cds
3528	16133	28612	0.94	0.0E+00	9558718	NT	Homo sapiens hypothetical protein (AF038169), mRNA
3528	16133	28613	0.94	0.0E+00	9558718	NT	Homo sapiens hypothetical protein (AF038169), mRNA
3532	16137	28618	2.45	0.0E+00	AF045452.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
3532	16137	28619	2.45	0.0E+00	AF045452.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
3540	16145	28628	1.19	0.0E+00	AF231922.1	NT	Homo sapiens chromosome 21 unknown mRNA
3547	16151	28631	0.95	0.0E+00	AA828677.1	EST_HUMAN	ab51f12.r1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844367 5'
3547	16151	28632	0.95	0.0E+00	AA828677.1	EST_HUMAN	ab51f12.r1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844367 5'
3547	16151	28633	0.95	0.0E+00	AA828677.1	EST_HUMAN	ab51f12.r1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844367 5'
3553	16157	28639	1.53	0.0E+00	BE304791.1	EST_HUMAN	601143853F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3051373 5'
3553	16157	28640	1.53	0.0E+00	BE304791.1	EST_HUMAN	601143853F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3051373 5'
3556	16160	28643	2.51	0.0E+00	4503948	NT	Homo sapiens coagulation factor IX (plasma thromboplastic component, Christmas disease, hemophilia B) (F9) mRNA
3557	16161	28644	1.08	0.0E+00	4828795	NT	Homo sapiens potassium voltage-gated channel, Isk-related family, member 2 (KCNE2) mRNA
3560	16164	28647	1.58	0.0E+00	O14867	SWISSPROT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
3565	16169	28651	0.93	0.0E+00	A1394007.1	EST_HUMAN	ba35g12.x1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:2088742 3' similar to TR:O00408 O00408 MYASTHENIA GRAVIS AUTOANTIGEN GRAVIN ;
3568	16172	28654	1.52	0.0E+00	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
3585	16189	28672	0.74	0.0E+00	AA456282.1	EST_HUMAN	z69h04.r1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:811927 5'
3585	16189	28673	0.74	0.0E+00	AA456282.1	EST_HUMAN	z69h04.r1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:811927 5'
3594	16188	28681	1	0.0E+00	AV701869.1	EST_HUMAN	AV701869 ADB Homo sapiens cDNA clone ADBDAH06 5'
3595	16189	28682	0.73	0.0E+00	4506884	NT	Homo sapiens semenogelin II (SEMG2) mRNA
3597	16201	28683	1.47	0.0E+00	AF078988.1	NT	Homo sapiens homologous yeast-44.2 protein mRNA, complete cds
3606	16210	28690	1.07	0.0E+00	AL133204.1	NT	Novel human gene mapping to chromosome X

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3610	16213	28683	0.99	0.0E+00	AB040808.1	NT	Homo sapiens mRNA for KIAA1478 protein, partial cds
3622	16225	28703	1.1	0.0E+00	8923087	NT	Homo sapiens hypothetical protein FLJ20080 (FLJ20080), mRNA
3633	16236	28711	1.18	0.0E+00	6967248	NT	Homo sapiens sal (Drosophila)-like 1 (SALL1), mRNA
3633	16236	28712	1.16	0.0E+00	6967248	NT	Homo sapiens sal (Drosophila)-like 1 (SALL1), mRNA
3634	16237		1.14	0.0E+00	A081907.1	EST_HUMAN	cc77c11.x1 Soares_NH-MPu_S1 Homo sapiens cDNA clone IMAGE:1662358 3' similar to WP.T1884.4 CE13742;
3638	16239	28715	1.28	0.0E+00	6325463	NT	Homo sapiens butyrophilin, subfamily 3, member A3 (BTN3A3), mRNA
3641	16244		5.41	0.0E+00	AW852217.1	EST_HUMAN	QV0-CT0225-230300-169-e01 CT0225 Homo sapiens cDNA
3645	16248	28724	1.06	0.0E+00	4504294	NT	Homo sapiens H3 histone family, member K (H3FK), mRNA
3649	16252		1.74	0.0E+00	AF118846.1	NT	Homo sapiens gamma-glutamylcysteine synthetase (GLCLC) gene, partial cds
3650	16253	28725	8.35	0.0E+00	BF876393.1	EST_HUMAN	602084583F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248568 5'
3653	16256		0.98	0.0E+00	AA988716.1	EST_HUMAN	cc94h08.s1 NCI_CGAP_K48 Homo sapiens cDNA clone IMAGE:1594043 3' similar to contains MER29.b2 MER29 repetitive element;
3663	16266	28737	0.9	0.0E+00	AW937977.1	EST_HUMAN	QV0-DT0047-170200-123-g01 DT0047 Homo sapiens cDNA
3675	16276	28743	0.8	0.0E+00	BF872054.1	EST_HUMAN	602162488F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4283645 5'
3675	16276	28744	0.8	0.0E+00	BF872054.1	EST_HUMAN	602162488F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4283645 5'
3678	16277		1.3	0.0E+00	4826887	NT	Homo sapiens retinoblastoma-binding protein 2 (RBBP2), mRNA
3678	16278	28746	0.98	0.0E+00	AW684693.1	EST_HUMAN	h84g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2979024 3'
3678	16278	28747	0.98	0.0E+00	AW684693.1	EST_HUMAN	h84g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2979024 3'
3682	16283	28751	0.8	0.0E+00	4826763	NT	Homo sapiens heparan sulfate (glucosamine) 3-O-sulfotransferase 1 (HS3ST1), mRNA
3684	16285	28754	0.91	0.0E+00	7662319	NT	Homo sapiens KIAA0808 gene product (KIAA0808), mRNA
3682	16293	28762	0.72	0.0E+00	4557762	NT	Homo sapiens midline 1 (Opitz/BBB syndrome) (MID1), mRNA
3682	16293	28763	0.72	0.0E+00	4557762	NT	Homo sapiens midline 1 (Opitz/BBB syndrome) (MID1), mRNA
3709	16310	28777	1.47	0.0E+00	D87327.1	NT	Homo sapiens mRNA for G protein-coupled inward rectifier potassium channel, complete cds
3712	16313		20.4	0.0E+00	7660491	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
3730	16331	28797	2.49	0.0E+00	AB026542.1	NT	Homo sapiens WAVE2 mRNA for WASP-family protein, complete cds
3732	16333	28799	0.93	0.0E+00	AB007866.2	NT	Homo sapiens mRNA for KIAA0408 protein, partial cds
3734	16335	28800	2.82	0.0E+00	AF124250.1	NT	Homo sapiens SH2-containing protein Nsp2 mRNA, complete cds
3734	16335	28801	2.82	0.0E+00	AF124250.1	NT	Homo sapiens SH2-containing protein Nsp2 mRNA, complete cds
3739	16340	28807	2.63	0.0E+00	AA852743.1	EST_HUMAN	NHTBCae15g09f1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBCae15g09
3739	16340	28808	2.63	0.0E+00	AA852743.1	EST_HUMAN	NHTBCae15g09f1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBCae15g09
3743	16344	28811	1.66	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3743	16344	28812	1.68	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
3748	16347	28815	1.08	0.0E+00	AW851714.1	EST_HUMAN	MR2-C10222-281089-005-005 CT0222 Homo sapiens cDNA
3748	16349	28817	1.4	0.0E+00	5729828	NT	Homo sapiens matrix metalloproteinase 24 (membrane-inserted) (MMP24), mRNA
3760	16351	28819	1.23	0.0E+00	AB018339.1	NT	Homo sapiens mRNA for KIAA0786 protein, partial cds
3762	16353	28821	1.56	0.0E+00	O14887	SWISSPROT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
3754	16355	28823	0.83	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0810 protein, partial cds
3754	16356	28824	0.83	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0810 protein, partial cds
3767	16368	28833	4.72	0.0E+00	AW288134.1	EST_HUMAN	UI-H-BW0-eps-e-12-Q-U1.s1 NCI CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2733022 3'
3767	16368	28834	4.72	0.0E+00	AW288134.1	EST_HUMAN	UI-H-BW0-eps-e-12-Q-U1.s1 NCI CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2733022 3'
3782	16392	28857	1.08	0.0E+00	AB004630.1	NT	Human gene for Type XIX collagen a1 chain, exon 6
3783	16393	28858	0.87	0.0E+00	AA463659.1	EST_HUMAN	sa04g01.f1 Soares_NIHMFu_S1 Homo sapiens cDNA clone IMAGE:612498 5' similar to SW:KRB4_SHEEP P02445 KERATIN, HIGH-SULFUR MATRIX PROTEIN, IIIB4. [1];
3788	16398	28863	1.04	0.0E+00	AB020710.1	NT	Homo sapiens mRNA for KIAA0803 protein, partial cds
3801	16401	28865	4.05	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3810	16408	28874	0.95	0.0E+00	AB037635.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
3823	16423	28885	7.87	0.0E+00	7682183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
3826	16428	28888	23.27	0.0E+00	4506718	NT	Homo sapiens ribosomal protein S2 (RPS2), mRNA
3834	16433	28894	1.04	0.0E+00	7657065	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
3834	16433	28895	1.04	0.0E+00	7657065	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
3873	16471	28935	0.92	0.0E+00	7681887	NT	Homo sapiens KIAA0022 gene product (KIAA0022), mRNA
3873	16471	28936	0.92	0.0E+00	7681887	NT	Homo sapiens KIAA0022 gene product (KIAA0022), mRNA
3882	16491	28951	2.65	0.0E+00	AF179733.1	NT	Pan troglodytes olfactory receptor (PTR208) gene, partial cds
3886	16486	28956	1.55	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3886	16486	28957	1.55	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3900	16489	28962	1.35	0.0E+00	A1376899.1	EST_HUMAN	ic0210.x1 Soares_NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2081307 3'
3901	16500		1.09	0.0E+00	AF152468.1	NT	Homo sapiens protocadherin beta 3 (PCDH-beta3) mRNA, complete cds
3902	16501	28963	2.32	0.0E+00	4758189	NT	Homo sapiens desmoplakin (DPI, DPLI) (DSIP) mRNA
3905	16504	28968	10.94	0.0E+00	S78885.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ6BIR1) gene, complete cds
3906	16505	28967	2.15	0.0E+00	7710148	NT	Homo sapiens methyl CpG binding protein 2 (MECP2), mRNA
3907	16506	28968	2.69	0.0E+00	7682183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
3910	16509	28970	1.1	0.0E+00	AF068801.2	NT	Homo sapiens myosin light chain kinase isoform 2 (MLCK) mRNA, complete cds
3910	16509	28971	1.1	0.0E+00	AF068801.2	NT	Homo sapiens myosin light chain kinase isoform 2 (MLCK) mRNA, complete cds
3916	16514	28977	0.84	0.0E+00	6812735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3921	16519	28985	6.15	0.0E+00	4503178	NT	Homo sapiens chromosome X open reading frame 5 (CXORF5) mRNA
3921	16519	28986	6.15	0.0E+00	4503178	NT	Homo sapiens chromosome X open reading frame 5 (CXORF5) mRNA
3923	16521	28989	4.15	0.0E+00	U09412.1	NT	Human zinc finger protein ZNF134 mRNA, complete cds
3924	16522	28990	32.21	0.0E+00	AF114498.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
3927	16525	28992	1.48	0.0E+00	4826783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
3930	16528	28995	1.1	0.0E+00	AF012615.1	NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 11
3931	16529	28998	1.93	0.0E+00	4759171	NT	Homo sapiens SC35-interacting protein 1 (SRRP129), mRNA
3933	16531	28999	1.09	0.0E+00	AF099117.1	NT	Homo sapiens amphiphysin gene, partial cds
3944	16542	29009	2.45	0.0E+00	AJ864727.1	EST_HUMAN	w401001.x1 NCI_CGAP_Lyn12 Homo sapiens cDNA clone IMAGE:2411065 3' similar to TR-O43340
3947	16545	29013	16.56	0.0E+00	4506742	NT	O43340 R28830.2, contains element PTR7 repetitive element;
3952	16550	29019	1.8	0.0E+00	AL040338.1	EST_HUMAN	Homo sapiens ribosomal protein S8 (RPS8), mRNA
3957	16555	29025	1.03	0.0E+00	6005887	NT	DKFZp434N0413.1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N0413.5
3957	16555	29026	1.03	0.0E+00	6005887	NT	Homo sapiens AP1 gamma subunit binding protein 1 (AP1GBP1), mRNA
3958	16556	29027	2.86	0.0E+00	4504193	NT	Homo sapiens AP1 gamma subunit binding protein 1 (AP1GBP1), mRNA
3960	16558		2.2	0.0E+00	4505078	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3) mRNA
3964	16562	29031	1.02	0.0E+00	AF149412.1	NT	Homo sapiens melanoma antigen, family B, 1 (MAGEB1) mRNA
3975	16573	29043	1.92	0.0E+00	4506758	NT	Homo sapiens HBP17 heparin-binding and FGF-binding protein gene, complete cds
3979	16577	29047	1.81	0.0E+00	4585642	NT	Homo sapiens tyrosine receptor 3 (RYR3) mRNA
3988	16586	29057	1.86	0.0E+00	BF355295.1	EST_HUMAN	Homo sapiens zinc finger protein (KIAA0412) mRNA
3990	16598	29059	1.04	0.0E+00	AW888221.1	EST_HUMAN	RC3-H10880-170800-011-a12 HT0880 Homo sapiens cDNA
3990	16598	29060	1.04	0.0E+00	AW888221.1	EST_HUMAN	MXRA5 Human matrix tissue expression library Homo sapiens cDNA clone Incyte 1986728 similar to MXRA5
3998	16598	29068	2.84	0.0E+00	AF129533.1	NT	Matrix remodeling associated gene 5
4001	16599	29071	1.06	0.0E+00	U86281.1	NT	MXRA5 Human matrix tissue expression library Homo sapiens cDNA clone Incyte 1986728 similar to MXRA5
4001	16599	29072	1.06	0.0E+00	U86281.1	NT	Matrix remodeling associated gene 5
4006	16604	29078	4.1	0.0E+00	BE378802.1	EST_HUMAN	Homo sapiens F-box protein Fbx3b (FBL3B) mRNA, partial cds
4014	16612	29085	1.28	0.0E+00	AW580740.1	EST_HUMAN	Homo sapiens olfactory receptor (OR7-141) gene, partial cds
4047	16644	29110	13.52	0.0E+00	AF116185.1	NT	Homo sapiens olfactory receptor (OR7-141) gene, partial cds
4047	16644	29111	13.52	0.0E+00	AF116185.1	NT	Homo sapiens olfactory receptor (OR7-141) gene, partial cds
4057	16654		4.5	0.0E+00	M23910.1	NT	601236989F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608800 5'
4059	16656		6.04	0.0E+00	AL163303.2	NT	PM3-LT0031-100100-003-h09 L.T0031 Homo sapiens cDNA
							Homo sapiens cancer-testis antigen CT10 (CT10) gene, complete cds
							Homo sapiens cancer-testis antigen CT10 (CT10) gene, complete cds
							Homo MHC class II lymphocyte antigen DPw4-beta-2 pseudogene, exon 2
							Homo sapiens chromosome 21 segment HS21G103

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4065	16862	28124	1.23	0.0E+00	AL118494.1	NT	Novel human gene mapping to chromosome 20
4066	16865	28126	3.49	0.0E+00	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4077	16873	28134	2.12	0.0E+00	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C068
4080	16888		60.88	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
4089	16893	28150	1.89	0.0E+00	U09368.1	NT	Human zinc finger protein ZNF133
4120	16713	28169	10.72	0.0E+00	AB015610.1	NT	Chlorococcus adhaesiva mRNA for ribosomal protein S4X, complete cds
4130	16722		3.27	0.0E+00	AJ238617.1	NT	Homo sapiens mRNA for UGA suppressor RNA-associated antigenic protein (SRNA48 gene)
4140	16732	28186	1.81	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4141	16733	28188	2.96	0.0E+00	AJ277276.1	NT	Homo sapiens mRNA for rape-2 (rape gene)
4141	16733	28187	2.06	0.0E+00	AJ277278.1	NT	Homo sapiens mRNA for rape-2 (rape gene)
4148	16740	28193	8.52	0.0E+00	5032028	NT	Homo sapiens retinoblastoma-binding protein 4 (RBBP4) mRNA
4148	16740	28194	8.52	0.0E+00	5032028	NT	Homo sapiens retinoblastoma-binding protein 4 (RBBP4) mRNA
4158	16750	28203	0.98	0.0E+00	4503814	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminimidazole synthetase (GART) mRNA
4164	16755	28207	7.55	0.0E+00	4895306	NT	Homo sapiens G protein-coupled receptor 21 (GPR21), mRNA
4165	16756	28208	4.94	0.0E+00	AB006825.1	NT	Homo sapiens mRNA for KIAA0287 gene, partial cds
4168	16759	28209	0.68	0.0E+00	4768807	NT	Homo sapiens ras GTPase activating protein-like (NGAP) mRNA
4168	16760	28210	8.82	0.0E+00	11419297	NT	Homo sapiens IMP (inosine monophosphate) dehydrogenase 1 (IMPDH1), mRNA
4170	16761	28211	2.88	0.0E+00	AL096857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
4171	16762		1.11	0.0E+00	AA018975.1	EST_HUMAN	ze55e09.1 Scores retina N2b-4f-IR Homo sapiens cDNA clone IMAGE:362920 5' similar to contains Alu repetitive element
4178	16769	28216	3.61	0.0E+00	AF165527.1	NT	Homo sapiens DGCR8 (DGCR8) mRNA, complete cds
4189	13773	28282	0.76	0.0E+00	4828947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
4189	13773	28283	0.76	0.0E+00	4828947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
4185	16785	28233	2.14	0.0E+00	5801905	NT	Homo sapiens butyrophilin, subfamily 3, member A2 (BTN3A2), mRNA
4196	16786	28234	1.21	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (60KD) (GABPA), mRNA
4196	16786	28235	1.21	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (60KD) (GABPA), mRNA
4198	16189	28692	0.57	0.0E+00	4506884	NT	Homo sapiens semaphorin II (SEM2) mRNA
4200	16789	28237	1.35	0.0E+00	8822391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
4200	16789	28238	1.35	0.0E+00	8822391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
4206	16795	28242	0.59	0.0E+00	AB020702.1	NT	Homo sapiens mRNA for KIAA0895 protein, partial cds
4213	16802	28251	18.39	0.0E+00	AI982597.1	EST_HUMAN	wu04404.x1 NCI CGAP CG8 Homo sapiens cDNA clone IMAGE:2515975 3'
4213	16802	28252	18.39	0.0E+00	AI982597.1	EST_HUMAN	wu04404.x1 NCI CGAP CG8 Homo sapiens cDNA clone IMAGE:2515975 3'
4216	16804	28254	1.08	0.0E+00	BE184856.1	EST_HUMAN	MR1-HT0707-100500-001-e02 HT0707 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4218	16804	28255	1.08	0.0E+00	BE184858.1	EST_HUMAN	MR1-1T0707-100500-001-402 HT0707 Homo sapiens cDNA
4221	16808		3.97	0.0E+00	BE274217.1	EST_HUMAN	601120778F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2987690 5'
4227	16815	29262	1.12	0.0E+00	AB032951.1	NT	Homo sapiens mRNA for KIAA1125 protein, partial cds
4227	16816	29263	1.12	0.0E+00	AB032951.1	NT	Homo sapiens mRNA for KIAA1125 protein, partial cds
4229	16817	29265	2.51	0.0E+00	5729725	NT	Homo sapiens nuclear receptor coactivator 3 (NCOA3), mRNA
4236	16824		5.9	0.0E+00	AW675599.1	EST_HUMAN	bs51004.x1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2800085 3' similar to SW:TH12_BOVIN
4241	16829	29279	1.14	0.0E+00	AW408788.1	EST_HUMAN	Q86108 MITOCHONDRIAL THIOREDOXIN PRECURSOR:
4242	16830	29280	1.84	0.0E+00	8922468	NT	UHF-BM0-adv-c-02-0-J1.r1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3063147 5'
4242	16830	29281	1.84	0.0E+00	8922468	NT	Homo sapiens hypothetical protein FLJ10498 (FLJ10498), mRNA
							Homo sapiens hypothetical protein FLJ10498 (FLJ10498), mRNA
4251	16839		2.08	0.0E+00	5174632	NT	Homo sapiens polycystic kidney disease (polycystin) and REJ (sperm receptor for egg jelly, sea urchin homolog)-like (PKDREJ) mRNA
4263	16849	29297	1.06	0.0E+00	AB037739.1	NT	Homo sapiens mRNA for KIAA1318 protein, partial cds
4270	16856	29303	10.06	0.0E+00	AA401438.1	EST_HUMAN	zu68107.s1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:743197 3' similar to contains Alu repetitive element; contains element MER35 repetitive element;
4270	16858	29304	10.06	0.0E+00	AA401438.1	EST_HUMAN	zu68107.s1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:743197 3' similar to contains Alu repetitive element; contains element MER35 repetitive element;
4273	16859	29308	1.01	0.0E+00	AF157476.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
4286	16872	29319	1.02	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
4286	16872	29320	1.02	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
4301	16887	29331	1.09	0.0E+00	7681969	NT	Homo sapiens KIAA0173 gene product (KIAA0173), mRNA
4305	16891	29333	1.6	0.0E+00	4758199	NT	Homo sapiens desmoplakin (DPI, DPL) (DSP) mRNA
4305	16891	29334	1.6	0.0E+00	4758199	NT	Homo sapiens desmoplakin (DPI, DPL) (DSP) mRNA
4314	16900		0.72	0.0E+00	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
4344	16931	29372	1.17	0.0E+00	AJ003145.1	NT	Homo sapiens mRNA for olfactory receptor protein, pseudogene
4348	16933	29374	0.96	0.0E+00	AJ010770.1	NT	Homo sapiens hyperion gene, exons 1-50
4360	16947	29389	17.92	0.0E+00	AJ02610.1	NT	Human apolipoprotein B-100 mRNA, complete cds
4375	16962	29408	0.84	0.0E+00	AW836889.1	EST_HUMAN	PM2-DT0023-080300-004-408 DT0023 Homo sapiens cDNA
4381	16968	29415	0.59	0.0E+00	4826827	NT	Homo sapiens myelodysplasia syndrome 1 (MDS1) mRNA
4381	16968	29416	0.59	0.0E+00	4826827	NT	Homo sapiens myelodysplasia syndrome 1 (MDS1) mRNA
4383	16970	29418	4.39	0.0E+00	AF174500.1	NT	Homo sapiens F-box protein FB4 (FBL4) mRNA, partial cds
4391	16977		2.19	0.0E+00	AH189844.1	EST_HUMAN	qd23106.x1 Scores_placenta_8to9weeks_2NtHP8t89W Homo sapiens cDNA clone IMAGE:1724579 3' similar to contains MER20.b2 MER20 repetitive element;
4395	16980		4.49	0.0E+00	U14520.1	NT	Human CBFA3 (Cbfa3) gene, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4389	16884	28428	0.84	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (withoxa (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
4418	17003	28446	0.9	0.0E+00	6563384	NT	Homo sapiens protein kinase C, η (PRKCH), mRNA
4418	17003	28447	0.9	0.0E+00	6563384	NT	Homo sapiens protein kinase C, η (PRKCH), mRNA
4425	17010	28453	1.16	0.0E+00	U10887.1	NT	Human G2 protein mRNA, partial cds
4425	17010	28454	1.16	0.0E+00	U10887.1	NT	Human G2 protein mRNA, partial cds
4433	17019	28459	11.1	0.0E+00	6812281	NT	Homo sapiens COMPLEMENT COMPONENT C1q RECEPTOR (C1QR), mRNA
4451	17037		1.13	0.0E+00	AF153047.2	NT	Homo sapiens gap junction protein connexin-36 (CX36) gene, complete cds
4460	17046	28489	4.6	0.0E+00	L14561.1	NT	Homo sapiens plasma membrane calcium ATPase isoform 1 (ATP2B1) gene, alternative splice products, partial cds
4464	17050	28484	5.78	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
4464	17050	28485	5.78	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
4470	17056	28501	1.97	0.0E+00	X60483.1	NT	H. sapiens H4/d gene for H4 histone
4470	17056	28502	1.97	0.0E+00	X60483.1	NT	H. sapiens H4/d gene for H4 histone
4475	17080	28508	10.17	0.0E+00	7862091	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4475	17080	28508	10.17	0.0E+00	7862091	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4484	17089	28519	1.11	0.0E+00	X62338.1	NT	Homo sapiens Menkes disease gene, exon 4
4487	17072	28523	16.07	0.0E+00	4885128	NT	Homo sapiens caudal type homeo box transcription factor 4 (CDX4), mRNA
4488	17073	28524	1.73	0.0E+00	AJ271738.1	NT	Homo sapiens Xq pseudautosomal region, segment 2/2
4491	17078	28528	1.14	0.0E+00	AB037781.1	NT	Homo sapiens mRNA for KIAA1390 protein, partial cds
4528	17110	28554	1.43	0.0E+00	7019458	NT	Homo sapiens myosin regulatory light chain interacting protein (MIR), mRNA
4537	17121		7.31	0.0E+00	AF195953.1	NT	Homo sapiens membrane-bound aminopeptidase P (XNPEP2) gene, complete cds
4545	17129	28572	1.27	0.0E+00	AJ249765.1	NT	Homo sapiens ACTN2 gene for alpha-Actinin 2, exon 10
4545	17129	28573	1.27	0.0E+00	AJ249765.1	NT	Homo sapiens ACTN2 gene for alpha-Actinin 2, exon 10
4549	17132	28579	0.58	0.0E+00	W28179.1	EST_HUMAN	24g7 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
4549	17132	28580	0.58	0.0E+00	W28179.1	EST_HUMAN	24g7 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
4555	17138	28585	6.07	0.0E+00	4508782	NT	Homo sapiens spinocerebellar ataxia 1 (olivopontocerebellar ataxia 1, autosomal dominant, ataxin 1) (SCA1), mRNA
4555	17138	28586	6.07	0.0E+00	4508782	NT	Homo sapiens spinocerebellar ataxia 1 (olivopontocerebellar ataxia 1, autosomal dominant, ataxin 1) (SCA1), mRNA
4587	17150		2.3	0.0E+00	AF200629.1	NT	Homo sapiens HPS1 gene, intron 5
4585	17168	28611	0.59	0.0E+00	T10233.1	EST_HUMAN	seq1329 b4HB3MA Cx8-HAP-FI Homo sapiens cDNA clone b4HB3MA-COT8-HAP-FI205 5'
4585	17168	28612	0.59	0.0E+00	T10233.1	EST_HUMAN	seq1329 b4HB3MA Cx8-HAP-FI Homo sapiens cDNA clone b4HB3MA-COT8-HAP-FI205 5'
4588	17171		0.65	0.0E+00	M14123.1	NT	Human endogenous retrovirus HERV-K10

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4589	17172	29816	1.48	0.0E+00	AA228126.1	EST_HUMAN	z58c04.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:687590 5' similar to TR:G222811
4589	17172	29817	1.48	0.0E+00	AA228126.1	EST_HUMAN	G222811 ALPHA 1 CHAIN OF TYPE XII COLLAGEN.;
4589	17183	29830	6.48	0.0E+00	AW084964.1	EST_HUMAN	z58c04.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:687590 5' similar to TR:G222811
4601	18007		2.1	0.0E+00	8051619	NT	G222811 ALPHA 1 CHAIN OF TYPE XII COLLAGEN.;
4603	17186	29833	0.92	0.0E+00	AI696688.1	EST_HUMAN	xc58e08.x1 NCI_CGAP_Esc2 Homo sapiens cDNA clone IMAGE:2589448 3' similar to SW:AHNK_HUMAN
4607	17190		8.58	0.0E+00	AL163207.2	NT	Q08686 NEUROBLAST DIFFERENTIATION ASSOCIATED PROTEIN AHNK.;
4609	17192	29838	2.41	0.0E+00	AW381570.1	EST_HUMAN	Homo sapiens LIM domain kinase 2 (LIMK2), transcript variant 2a, mRNA
4615	17198	29845	1.43	0.0E+00	AJ278120.1	NT	wc58e02.x1 NCI_CGAP_Pt28 Homo sapiens cDNA clone IMAGE:2322603 3' similar to contains MIER22.b2
4615	17198	29848	1.43	0.0E+00	AJ278120.1	NT	PTR5 repetitive element.;
4617	17200	29848	2.01	0.0E+00	4758467	NT	Homo sapiens chromosome 21 segment HS21C007
4618	17201	29849	3.29	0.0E+00	AF108830.1	NT	PM1-170305-101169-002-d03 HT0305 Homo sapiens cDNA
4623	17208	29855	1.19	0.0E+00	4506952	NT	Homo sapiens mRNA for putative ankyrin-repeat containing protein (ORF1)
4628	17211	29861	1.16	0.0E+00	AF111163.1	NT	Homo sapiens mRNA for putative ankyrin-repeat containing protein (ORF1)
4628	17211	29862	1.16	0.0E+00	AF111163.1	NT	Homo sapiens G protein-coupled receptor 50. (GPR50) mRNA
4637	18008	29873	2.92	0.0E+00	6005073	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
4642	17224	29878	4.04	0.0E+00	AF208161.1	NT	Homo sapiens sialyltransferase 8 (alpha-N-acetylneuraminase, alpha-2,8-sialyltransferase, GD3 synthase) (SIA T8) mRNA
4647	17229	29885	1.66	0.0E+00	AF152337.1	NT	Homo sapiens pyrin (MEFV) gene, complete cds
4650	17232	29889	1.5	0.0E+00	5454175	NT	Homo sapiens pyrin (MEFV) gene, complete cds
4662	17244	29898	32.6	0.0E+00	4503470	NT	Homo sapiens zinc finger protein 185 (ZNF185), mRNA
4671	17253	29705	0.79	0.0E+00	4505016	NT	Homo sapiens syncytin precursor, mRNA, complete cds
4676	17257	29708	1.02	0.0E+00	4503098	NT	Homo sapiens protocadherin gamma C3 (PCDH-gamma-C3) mRNA, complete cds
4679	17261	29713	1.14	0.0E+00	4502556	NT	Homo sapiens zinc finger protein 211 (ZNF211), mRNA
4684	17266		3.03	0.0E+00	L35485.1	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
4688	17288	29716	0.76	0.0E+00	7662091	NT	Homo sapiens low density lipoprotein receptor-related protein 6 (LRP6) mRNA, and translated products
4688	17288	29717	0.75	0.0E+00	7662091	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
4707	17289	29733	3.17	0.0E+00	AF143314.1	NT	Homo sapiens calcium/calmodulin-dependent protein kinase IV (CAMK4) mRNA
4710	17292	29736	11.37	0.0E+00	AJ245418.1	NT	Homo sapiens thymidine kinase 1 (TK1) gene, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4710	17282	29737	11.37	0.0E+00	AJ245418.1	NT	Homo sapiens mRNA for G7c protein (G7c gene located in the class III region of the major histocompatibility complex)
4712	17284	29738	0.84	0.0E+00	AB018338.1	NT	Homo sapiens mRNA for KIAA0785 protein, partial cds
4718	17288		0.65	0.0E+00	D87875.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4730	17311		1.88	0.0E+00	AA174072.1	EST_HUMAN	zp19g08.s1 Strategene fetal retina 837202 Homo sapiens cDNA clone IMAGE:608954 3'
4732	17313		1.97	0.0E+00	7857410	NT	Homo sapiens chromosome 21 segment HS21C084
4734	17316		2.45	0.0E+00	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4735	17318	29758	1.89	0.0E+00	AF184110.1	NT	Homo sapiens cyclophilin-related protein (NKTR) gene, complete cds
4736	17317	29759	5.45	0.0E+00	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
4737	17318		1.94	0.0E+00	AB037521.1	NT	Homo sapiens gene for neurilemmic protein, partial cds
4739	17320	29760	0.82	0.0E+00	AF185658.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds
4747	17328	29770	8.77	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
4747	17328	29771	8.77	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
4748	17329	29772	1.57	0.0E+00	AF187441.1	NT	Mus musculus E-cadherin binding protein E7 mRNA, complete cds
4757	17338	29783	1.13	0.0E+00	AB028870.1	NT	Homo sapiens mRNA for KIAA1047 protein, partial cds
4757	17338	29784	1.13	0.0E+00	AB028870.1	NT	Homo sapiens mRNA for KIAA1047 protein, partial cds
4763	17344	29782	12.17	0.0E+00	Y18880.1	NT	Human endogenous retrovirus type K (HERV-K), gag, pol and env genes
4772	17353	29805	1.21	0.0E+00	BE081527.1	EST_HUMAN	QV2-BT0635-160400-142-H03 BT0635 Homo sapiens cDNA
4773	17354	29806	1.04	0.0E+00	AA418248.1	EST_HUMAN	z46807.s1 Soares_NIH-MP_u_S1 Homo sapiens cDNA clone IMAGE:767805 3'
4779	17360		2.04	0.0E+00	AF088641.1	NT	Homo sapiens truncated tensin XB (TNXB) gene, partial cds and TNXA gene recombination breakpoint region
4785	17365	29816	1.09	0.0E+00	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
4785	17365	29817	1.09	0.0E+00	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
4786	17368	29818	2.54	0.0E+00	AB037820.1	NT	Homo sapiens mRNA for KIAA1389 protein, partial cds
4786	17368	29819	2.54	0.0E+00	AB037820.1	NT	Homo sapiens mRNA for KIAA1389 protein, partial cds
4787	17367	29820	2.04	0.0E+00	M74089.1	NT	Human displacement protein (CCAAT) mRNA
4792	17371	29824	2	0.0E+00	6453812	NT	Homo sapiens butyrophilin, subfamily 2, member A2 (BTN2A2) mRNA
4792	17371	29825	2	0.0E+00	6453812	NT	Homo sapiens butyrophilin, subfamily 2, member A2 (BTN2A2) mRNA
4794	12809	25297	1.8	0.0E+00	T58945.1	EST_HUMAN	ye83g04.2 Strategene fetal spleen (#837205) Homo sapiens cDNA clone IMAGE:68310 5'
4794	12809	25298	1.8	0.0E+00	T58945.1	EST_HUMAN	ye83g04.2 Strategene fetal spleen (#837205) Homo sapiens cDNA clone IMAGE:68310 5'
4797	17375		1.1	0.0E+00	BE278730.1	EST_HUMAN	601158835F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3505521 5'
4803	17381	29831	0.84	0.0E+00	BE380050.1	EST_HUMAN	601285248F1 NIH_MGC 44 Homo sapiens cDNA clone IMAGE:3807087 5'
4818	17398	29849	0.93	0.0E+00	5728817	NT	Homo sapiens ecotropic viral integration site 2B (EV12B), mRNA
4818	17398	29850	0.93	0.0E+00	5728817	NT	Homo sapiens ecotropic viral integration site 2B (EV12B), mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4819	17397	28851	1.01	0.0E+00	U56851.1	NT	Mus musculus neurophilin 1 (Nph1) gene, large exon and 3' end of the intron, and partial cds
4823	17401	28854	5.32	0.0E+00	M80902.1	NT	Human AHNK nucleoprotein mRNA, 5' end
4828	17404	28857	133.49	0.0E+00	M89197.1	NT	Human haptoglobin and haptoglobin-related protein (HP and HPR) genes, complete cds
4828	17404	28858	133.49	0.0E+00	M89197.1	NT	Human haptoglobin and haptoglobin-related protein (HP and HPR) genes, complete cds
4829	17407	28861	1.32	0.0E+00	AF184110.1	NT	Homo sapiens cyclophilin-related protein (NKTR) gene, complete cds
4832	17410	28863	1.28	0.0E+00	7802181	NT	Homo sapiens KIAA0563 gene product (KIAA0563), mRNA
4851	17429		1.08	0.0E+00	X58487.1	NT	Human GYP2D7AP pseudogene for cytochrome P450 2D6
4861	17439	28888	0.83	0.0E+00	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
4861	17439	28889	0.83	0.0E+00	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
4873	17448	28899	1.3	0.0E+00	AF028801.1	NT	Homo sapiens alpha-3 type IX collagen (COL9A3) gene, promoter region, and exons 1-28
4878	17451	28902	0.91	0.0E+00	6877700	NT	Homo sapiens G-protein coupled receptor (RE2), mRNA
4879	17451	28903	0.81	0.0E+00	6877700	NT	Homo sapiens G-protein coupled receptor (RE2), mRNA
4879	17454	28908	0.83	0.0E+00	7019320	NT	Homo sapiens protein0008 (AD013), mRNA
4879	17454	28907	0.83	0.0E+00	7019320	NT	Homo sapiens protein0008 (AD013), mRNA
4900	17475	28931	1.91	0.0E+00	AW444837.1	EST_HUMAN	U1H-B13-qiv-c-04-U1.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2733284 3'
4907	17482	28940	1.36	0.0E+00	AF303134.1	NT	Homo sapiens aldehyde dehydrogenase 12 (ALDH12) mRNA, complete cds
4910	17485		1.51	0.0E+00	AF083242.1	NT	Homo sapiens HSPC924-iso mRNA, complete cds
4923	17498		0.59	0.0E+00	AW338253.1	EST_HUMAN	x289408.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2871371 3'
4988	17542		3.61	0.0E+00	AF240788.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
4971	17545	28987	1.76	0.0E+00	X87205.1	NT	M.fascicularis mRNA for metalloprotease-like, disintegrin-like protein, IVa
4973	17547	28989	1.19	0.0E+00	AF084478.1	NT	Homo sapiens Williams-Beuren syndrome deletion transcript 9 (WBSCR9) mRNA, complete cds
4974	17548	28990	1.36	0.0E+00	AF097416.1	NT	Mus musculus zinc finger transcription factor Kaiso mRNA, complete cds
4975	17549	28991	4.89	0.0E+00	4503766	NT	Homo sapiens fragile X mental retardation 2 (FMR2) mRNA
4977	17551	28993	12.25	0.0E+00	4885048	NT	Homo sapiens actin, alpha, cardiac muscle (ACTC), mRNA
4978	17552	28994	1.19	0.0E+00	P52740	SWISSPROT	ZINC FINGER PROTEIN 132
4980	17554	28996	1.7	0.0E+00	8822180	NT	Homo sapiens hypothetical protein DKFZp782E1312 (DKFZp782E1312), mRNA
4983	17557	30000	5.09	0.0E+00	8823090	NT	Homo sapiens hypothetical protein FLJ20073 (FLJ20073), mRNA
4987	17561	30004	1.8	0.0E+00	M84081.1	NT	Human Tcr-C-delta gene, exons 1-4; Tcr-V-delta gene, exons 1-2; T-cell receptor alpha (Tcr-alpha) gene, J1-J61 segments; and Tcr-C-alpha gene, exons 1-4
4987	17561	30005	1.8	0.0E+00	M84081.1	NT	Human Tcr-C-delta gene, exons 1-4; Tcr-V-delta gene, exons 1-2; T-cell receptor alpha (Tcr-alpha) gene, J1-J61 segments; and Tcr-C-alpha gene, exons 1-4
4989	17563	30007	1.78	0.0E+00	X94628.1	NT	H. sapiens MeCP-2 gene
4989	17563	30008	1.78	0.0E+00	X94628.1	NT	H. sapiens MeCP-2 gene

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4892	17666	30011	2.79	0.0E+00	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
4894	17668	30012	0.88	0.0E+00	7706004	NT	Homo sapiens IMAGE-C2 (MAGEC2), mRNA
5006	17678	30022	0.95	0.0E+00	5032150	NT	Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, 1, 28kD (TAF2i) mRNA
5015	17589	30032	1.75	0.0E+00	4585642	NT	Homo sapiens zinc finger protein (KIAA0412) mRNA
5016	17590	30033	0.64	0.0E+00	AB037864.1	NT	Homo sapiens mRNA for KIAA1443 protein, partial cds
5017	17591	30034	1.32	0.0E+00	AB014533.1	NT	Homo sapiens mRNA for KIAA0833 protein, partial cds
5018	17582	30035	2.53	0.0E+00	6877648	NT	Mus musculus zinc finger protein interacting with K protein 1 (Zik1), mRNA
5019	17593	30036	2.01	0.0E+00	5174560	NT	Homo sapiens meningioma expressed antigen 8 (coiled-coil proline-rich) (MGEA8), mRNA
5021	17595	30038	2.81	0.0E+00	4768199	NT	Homo sapiens desmoplakin (DPI, DPL) (DSP) mRNA
5023	17597	30040	0.88	0.0E+00	Y18723.1	NT	Homo sapiens gene encoding filensin, exon 8
5024	17598	30041	1.26	0.0E+00	5174560	NT	Homo sapiens meningioma expressed antigen 8 (coiled-coil proline-rich) (MGEA8), mRNA
5024	17598	30042	1.26	0.0E+00	5174560	NT	Homo sapiens meningioma expressed antigen 8 (coiled-coil proline-rich) (MGEA8), mRNA
5028	17600	30045	16.3	0.0E+00	AF055086.1	NT	Homo sapiens MHC class 1 region
5028	17602	30046	2.87	0.0E+00	4505508	NT	Homo sapiens oploid receptor, delta 1 (OPRD1) mRNA
5029	17603	30048	3.33	0.0E+00	AF091711.1	NT	Homo sapiens splice variant AKAP350 mRNA, partial cds
5041	17614	30058	2.27	0.0E+00	4503684	NT	Homo sapiens farnesyl diphosphate synthase (farnesyl pyrophosphate synthetase, dimethylallyltransferase, geranyltransferase) (FDPS) mRNA
5043	17616	30060	3.9	0.0E+00	4557472	NT	Homo sapiens chloride channel 5 (nephrolithiasis 2, X-linked, Dent disease) (CLCN5) mRNA
5043	17616	30061	3.9	0.0E+00	4557472	NT	Homo sapiens chloride channel 5 (nephrolithiasis 2, X-linked, Dent disease) (CLCN5) mRNA
5058	17631		0.59	0.0E+00	AI291129.1	EST_HUMAN	qmr1605.1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1681921 3' similar to TR:Q61632 Q61632
5061	17634	30076	2.85	0.0E+00	AB006825.1	NT	EN-2LACZ FUSION PROTEIN ;
5061	17634	30077	2.85	0.0E+00	AB006825.1	NT	Homo sapiens mRNA for KIAA07287 gene, partial cds
5072	17645	30087	0.92	0.0E+00	AB028808.1	NT	Homo sapiens mRNA for KIAA07287 gene, partial cds
5088	17661	30101	1.36	0.0E+00	AL163284.2	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
5083	17668	30105	0.57	0.0E+00	7682319	NT	Homo sapiens chromosome 21 segment HS21C084
5103	17675	30115	2.12	0.0E+00	4502398	NT	Homo sapiens KIAA0806 gene product (KIAA0806), mRNA
5108	17680		7.33	0.0E+00	U14987.1	NT	Homo sapiens beaded filament structural protein 1, filensin (BFSP1) mRNA
5118	17690	30128	1.25	0.0E+00	M10976.1	NT	Human ribosomal protein L21 mRNA, complete cds
5121	17693		2.86	0.0E+00	BE408863.1	EST_HUMAN	Human endogenous retroviral DNA (4-1), complete retroviral segment
5124	17696	30133	3.82	0.0E+00	4758199	NT	601303729F-1 NIH_MGC-21 Homo sapiens cDNA clone IMAGE:3638118 5'
5135	17707	30139	1.19	0.0E+00	AB028808.1	NT	Homo sapiens desmoplakin (DPI, DPL) (DSP) mRNA
						NT	Homo sapiens mRNA for KIAA1043 protein, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5152	17722	30152	1.88	0.0E+00	8823441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
5152	17722	30153	1.88	0.0E+00	8823441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
5170	17738	30165	1.07	0.0E+00	AA601246.1	EST_HUMAN	no14g09.s1 NCL_OGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100704 3' similar to TR:E239140
5170	17738	30166	1.07	0.0E+00	AA601246.1	EST_HUMAN	no14g09.s1 NCL_OGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100704 3' similar to TR:E239140
5170	17738	30167	1.07	0.0E+00	AA601246.1	EST_HUMAN	no14g09.s1 NCL_OGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100704 3' similar to TR:E239140
5172	17739	30168	0.98	0.0E+00	AF161463.1	NT	Homo sapiens HSPC114 mRNA, complete cds
5172	17739	30169	0.98	0.0E+00	AF161463.1	NT	Homo sapiens HSPC114 mRNA, complete cds
5183	12887	25374	0.98	0.0E+00	AF195656.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds
5188	17763	30189	1.72	0.0E+00	4758225	NT	Homo sapiens E2F transcription factor 2 (E2F2) mRNA
5188	17764	30189	0.94	0.0E+00	AF016705.1	NT	Homo sapiens E6-AP ubiquitin-protein ligase (UBE3A) gene, exon 3
5204	17768	30192	0.67	0.0E+00	U53598.1	NT	Homo sapiens MHC class 1 region
5211	17776		1.3	0.0E+00	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C009
5214	17779		29.82	0.0E+00	D50957.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTGFP3) pseudogene
5245	17809	30231	3.36	0.0E+00	X52988.1	NT	Bacillus amyloquelicifera sacB gene for levansucrase (EC 2.4.1.10)
5266	17828	30252	1.23	0.0E+00	AF240635.1	NT	Homo sapiens vascular endothelial cadherin 2 mRNA, complete cds
5266	17828	30253	1.23	0.0E+00	AF240635.1	NT	Homo sapiens vascular endothelial cadherin 2 mRNA, complete cds
5267	17829	30254	0.98	0.0E+00	5454163	NT	Homo sapiens cyclophilin (USA-CYP) mRNA
5282	17844	30271	0.95	0.0E+00	6677700	NT	Homo sapiens G-protein coupled receptor (RE2), mRNA
5288	17860	30285	0.77	0.0E+00	5902055	NT	Homo sapiens ring finger protein (RNF), mRNA
5300	17862	30286	1.03	0.0E+00	M10905.1	NT	Human cellular fibronectin mRNA
5300	17862	30287	1.03	0.0E+00	M10905.1	NT	Human cellular fibronectin mRNA
5301	17863	30288	0.93	0.0E+00	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, hcfet gene, and sodium phosphate transporter (NPT3) gene, complete cds
5308	17870	30282	0.94	0.0E+00	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
5328	17888	30304	0.67	0.0E+00	5902091	NT	Homo sapiens solute carrier family 5 (inositol transporters), member 3 (SLC5A3), mRNA
5333	17894	30308	1.1	0.0E+00	L35475.1	NT	Human effector receptor-like gene, complete cds
5333	17894	30309	1.1	0.0E+00	L35475.1	NT	Human effector receptor-like gene, complete cds
5340	17901	30316	0.91	0.0E+00	7706245	NT	Homo sapiens 4F2 light chain (LOC51597), mRNA
5340	17901	30317	0.91	0.0E+00	7706245	NT	Homo sapiens 4F2 light chain (LOC51597), mRNA
5341	17902	30318	0.6	0.0E+00	7662421	NT	Homo sapiens KIAA0971 protein (KIAA0971), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5347	17907	30322	25.99	0.0E+00	J02610.1	NT	Human apolipoprotein B-100 mRNA, complete cds
5355	17915	30330	0.98	0.0E+00	U71801.1	NT	Human zinc finger protein zfp47 (zfp47) mRNA, partial cds
5357	17917	30332	1.08	0.0E+00	P51523	SWISSPROT	ZINC FINGER PROTEIN 84 (ZINC FINGER PROTEIN HPF2)
5365	17925	30339	9.37	0.0E+00	M19828.1	NT	Human apolipoprotein B-100 (apoB) gene, exons 22 through 29
5373	17932	30346	11.28	0.0E+00	S360213	NT	Human apolipoprotein B-100 (apoB) gene, exons 22 through 29
5374	17933	30347	1.1	0.0E+00	4826777	NT	Human apolipoprotein B-100 (apoB) gene, exons 22 through 29
5377	17936	30349	0.68	0.0E+00	AEO00327.1	NT	Escherichia coli K-12 MG1655 section 217 of 400 of the complete genome
5385	17944	30357	8.08	0.0E+00	4502152	NT	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5389	17957	30368	1.01	0.0E+00	4885474	NT	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5430	17987	30391	1.58	0.0E+00	4826877	NT	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5451	18020	30411	3.65	0.0E+00	AF093093.1	NT	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5459	18084	30411	2.28	0.0E+00	AF137286.1	NT	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5459	18084	30412	2.28	0.0E+00	AF137286.1	NT	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5478	18112	30521	1.27	0.0E+00	A834054.1	EST_HUMAN	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5481	18115	30524	2.18	0.0E+00	9256679	NT	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5495	18129	30537	3.75	0.0E+00	BE931080.1	EST_HUMAN	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5499	18133	30541	3.31	0.0E+00	AF182034.1	NT	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5499	18133	30542	3.31	0.0E+00	AF182034.1	NT	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5508	18139	30550	2.08	0.0E+00	X56163.1	NT	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5508	18139	30551	2.08	0.0E+00	X56163.1	NT	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5584	18215	30684	5.94	0.0E+00	BE575468.1	EST_HUMAN	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5585	18216	30685	1.67	0.0E+00	BE220763.1	EST_HUMAN	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5586	18217	30688	1.58	0.0E+00	BE784412.1	EST_HUMAN	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5586	18217	30687	1.58	0.0E+00	BE784412.1	EST_HUMAN	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5589	18220	30670	7.35	0.0E+00	M29008.1	NT	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5600	24746	30678	4.43	0.0E+00	11421038	NT	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5609	18238	30684	1.68	0.0E+00	BF665862.1	EST_HUMAN	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5614	18243	30684	0.8	0.0E+00	BF538857.1	EST_HUMAN	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5622	18261	30719	1.49	0.0E+00	BE282784.1	EST_HUMAN	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5628	18255	30724	2.5	0.0E+00	BF526328.1	EST_HUMAN	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5628	18255	30725	2.5	0.0E+00	BF526328.1	EST_HUMAN	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5645	18508	32325	2.91	0.0E+00	4557384	NT	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5648	18270	30751	0.9	0.0E+00	AB007835.1	NT	Human apolipoprotein B (including Ag(x) antigen) (APOB) mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID N :	Exon SEQ ID NO :	ORF SEQ ID NO :	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5648	18276	30752	0.9	0.0E+00	AB007835.1	NT	Homo sapiens mRNA for KIAA0488 protein, partial cds
5652	18279	30756	4.93	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
5652	18279	30757	4.93	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
5665	18292	30771	1.42	0.0E+00	D26835.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
5665	18292	30772	1.42	0.0E+00	D26835.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
5680	18307	30803	1.98	0.0E+00	11420818	NT	Homo sapiens effector receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5686	18312	30809	0.86	0.0E+00	Z38133.1	NT	H. sapiens mRNA for myosin
5704	18330	30833	0.88	0.0E+00	D61584.1	EST_HUMAN	HUM418D05B Clontech human fetal brain polyA+ mRNA (#6535) Homo sapiens cDNA clone GEN-418D05
5704	18330	30834	0.89	0.0E+00	D61584.1	EST_HUMAN	5'
5707	18333	30836	5.12	0.0E+00	BF529831.1	EST_HUMAN	60204232ZF1 NCI_CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4178988 5'
5707	18333	30839	5.12	0.0E+00	BF529831.1	EST_HUMAN	60204232ZF1 NCI_CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4178988 5'
5712	18338	30843	2.7	0.0E+00	BF313139.1	EST_HUMAN	601897658F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126815 5'
5723	18349	31052	4.03	0.0E+00	11434382	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1G subunit (CACNA1G), mRNA
5753	18379	31090	1.49	0.0E+00	BE260777.1	EST_HUMAN	601150252F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502809 5'
5762	18388		4.96	0.0E+00	AW867318.1	EST_HUMAN	MRO-SN0037-030400-001-h07 SN0037 Homo sapiens cDNA
5775	18400	31114	2.42	0.0E+00	BE282889.1	EST_HUMAN	601105281F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987903 5'
5775	18400	31115	2.42	0.0E+00	BE282889.1	EST_HUMAN	601105281F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987903 5'
5783	18418	31133	1.87	0.0E+00	11420818	NT	Homo sapiens effector receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5793	18418	31134	1.97	0.0E+00	11420818	NT	Homo sapiens effector receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5800	18425	31142	4.39	0.0E+00	AF084254.1	NT	Homo sapiens very long-chain acyl-CoA synthetase homolog 1 mRNA, complete cds
5800	18425	31143	4.39	0.0E+00	AF084254.1	NT	Homo sapiens very long-chain acyl-CoA synthetase homolog 1 mRNA, complete cds
5806	18431	31151	2.56	0.0E+00	AJ224639.1	NT	Homo sapiens SurF-5 and SurF-6 genes
5806	18431	31152	2.56	0.0E+00	AJ224639.1	NT	Homo sapiens SurF-5 and SurF-6 genes
5833	18457	31178	0.72	0.0E+00	AI198515.1	EST_HUMAN	qf04g10.x1 Soares_Placenta_8658weeks_2NBP8b0W Homo sapiens cDNA clone IMAGE:1757730 3'
5837	18461	31184	6.38	0.0E+00	M85719.1	EST_HUMAN	similar to SW:CADDC_HUMAN P55289 BRAIN-CADHERIN PRECURSOR ;
5844	18468	31193	6.29	0.0E+00	AW45472.1	EST_HUMAN	EST02238 Fetal brain, Strabopene (cat8936206) Homo sapiens cDNA clone HFBCMA48
5856	18479	31202	1.35	0.0E+00	Z6289.1	NT	UHIF-BLD-adh-4-02-0-JL1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3081858 5'
5866	18488	31212	1.78	0.0E+00	AW361877.1	EST_HUMAN	H. sapiens isoform 1 gene for L-type calcium channel, exon 14 and 15
5866	18488	31213	1.78	0.0E+00	AW361877.1	EST_HUMAN	PM3-CT0263-091289-007-h05 CT0263 Homo sapiens cDNA
5866	18488	31214	1.78	0.0E+00	AW361877.1	EST_HUMAN	PM3-CT0263-091289-007-h05 CT0263 Homo sapiens cDNA
5870	18492	31219	1.91	0.0E+00	U36281.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 13

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5897	18519	31244	1.02	0.0E+00	AB046881.1	NT	Homo sapiens mRNA for KIAA1841 protein, partial cds
5851	18573	31305	1.48	0.0E+00	AJ005345.1	NT	Homo sapiens KVLQT1 gene
5951	18573	31308	1.48	0.0E+00	AJ005345.1	NT	Homo sapiens KVLQT1 gene
5958	18580	31315	1.29	0.0E+00	AL207816.1	EST_HUMAN	HA2081 Human fetal liver cDNA library Homo sapiens cDNA
5975	18585	31330	4.89	0.0E+00	11416801	NT	Homo sapiens protocadherin beta 2 (PCDH2), mRNA
5980	18600	31333	1.09	0.0E+00	BE791173.1	EST_HUMAN	601584032F1 NIH_MGC 7 Homo sapiens cDNA clone IMAGE:3838551 5'
5987	18607	31341	1.29	0.0E+00	9838943	NT	Homo sapiens amiloride-sensitive cation channel 1, neuronal (degenerin) (ACCN1), mRNA
5988	18608	31342	6.36	0.0E+00	BE560082.1	EST_HUMAN	601345141F1 NIH_MGC 8 Homo sapiens cDNA clone IMAGE:3677843 5'
5989	18609	31343	1.48	0.0E+00	10048478	NT	Mus musculus acorin (Acc), mRNA
5990	18610	31344	3.25	0.0E+00	U86981.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exon 13B and isoform beta-1B, complete cds
5990	18610	31345	3.25	0.0E+00	U86981.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exon 13B and isoform beta-1B, complete cds
6008	18628	31363	2.23	0.0E+00	BF338835.1	EST_HUMAN	602036272F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4184321 5'
6010	18630	31366	0.88	0.0E+00	AF142821.1	NT	Homo sapiens calcium channel gamma 5 subunit (CACNG5) gene, exon 4 and complete cds
6011	18631	31368	3.17	0.0E+00	BE273983.1	EST_HUMAN	601104462F1 NIH_MGC 14 Homo sapiens cDNA clone IMAGE:3347483 5'
6020	18639	31379	1.22	0.0E+00	BE503086.1	EST_HUMAN	h283d11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3214581 3' similar to TR:Q62084 Q62084 PHOSPHOLIPASE C NEIGHBORING ;
6024	18643	31385	2.27	0.0E+00	BF568905.1	EST_HUMAN	602185852F1 NIH_MGC 45 Homo sapiens cDNA clone IMAGE:4310078 5'
6028	18647	31388	1.14	0.0E+00	AA454642.1	EST_HUMAN	z69d08.a1 Soares_NHMPU_S1 Homo sapiens cDNA clone IMAGE:311883 3'
6060	18677	31419	3.11	0.0E+00	AF217289.1	NT	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
6062	18678	31421	2.35	0.0E+00	BE828144.1	EST_HUMAN	RC5-ET0027-210500-022-G10 ET0027 Homo sapiens cDNA
6066	18683	31425	1.25	0.0E+00	BE958638.1	EST_HUMAN	601945287F1 NIH_MGC 58 Homo sapiens cDNA clone IMAGE:3830453 5'
6063	18700	31447	0.9	0.0E+00	AW276760.1	EST_HUMAN	xp89f03.x1 NCI_CGAP_Ov39 Homo sapiens cDNA clone IMAGE:2745245 3' similar to TR:P78335 P78335 GUANYLATE KINASE ASSOCIATED PROTEIN ;
6093	18709	31457	0.98	0.0E+00	BF031742.1	EST_HUMAN	601589060F1 NIH_MGC 58 Homo sapiens cDNA clone IMAGE:3827775 5'
6093	18709	31458	0.98	0.0E+00	BF031742.1	EST_HUMAN	601589060F1 NIH_MGC 58 Homo sapiens cDNA clone IMAGE:3827775 5'
6104	18720	31473	1.03	0.0E+00	AW470846.1	EST_HUMAN	h283d08.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2875595 3' similar to TR:Q821N3 Q821N3 MYOSIN-RHO GTPASE ASSOCIATED PROTEIN, MYR 7 ;
6115	18731	31483	1.1	0.0E+00	BF155670.1	EST_HUMAN	QV4-HT0894-290900-399-a10 HT0894 Homo sapiens cDNA
6115	18731	31484	1.1	0.0E+00	BF155670.1	EST_HUMAN	QV4-HT0894-290900-399-a10 HT0894 Homo sapiens cDNA
6123	18738	31490	1.38	0.0E+00	W33069.1	EST_HUMAN	z608h08.r1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:321755 5'
6123	18738	31491	1.38	0.0E+00	W33069.1	EST_HUMAN	z608h08.r1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:321755 5'
6124	18739		2.2	0.0E+00	AF012618.1	NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 14

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6127	18742	31495	3.14	0.0E+00	BE280197.1	EST_HUMAN	601158515F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3503323 5'
6133	18747	31503	1.88	0.0E+00	BE889810.1	EST_HUMAN	601512830F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914238 5'
6148	18761	31520	1.48	0.0E+00	11433071	NT	Homo sapiens KIAA0735 gene product; synaptic vesicle protein 2B homolog (KIAA0735), mRNA
6148	18761	31521	1.48	0.0E+00	11433071	NT	Homo sapiens KIAA0735 gene product; synaptic vesicle protein 2B homolog (KIAA0735), mRNA
6149	18762	31522	1.15	0.0E+00	BE601608.1	EST_HUMAN	601677735F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3960200 5'
6149	18762	31523	1.15	0.0E+00	BE601608.1	EST_HUMAN	601677735F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3960200 5'
6149	18762	31524	1.15	0.0E+00	BE601608.1	EST_HUMAN	601677735F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3960200 5'
6164	24758	31540	10.16	0.0E+00	9780088	NT	Homo sapiens potassium voltage-gated channel, Shal-related subfamily, member 2 (KCND2), mRNA
6167	18778	31543	1.38	0.0E+00	AA183506.1	EST_HUMAN	z40h01.r1 Soares NIH-IMPu_S1 Homo sapiens cDNA clone IMAGE:665805 5' similar to SW:YY05 HUMAN P42894 HYPOTHETICAL MYELOID CELL LINE PROTEIN 5. ;
6167	18778	31544	1.38	0.0E+00	AA183506.1	EST_HUMAN	z40h01.r1 Soares NIH-IMPu_S1 Homo sapiens cDNA clone IMAGE:665805 5' similar to SW:YY05 HUMAN P42894 HYPOTHETICAL MYELOID CELL LINE PROTEIN 5. ;
6189	18789	31568	12.83	0.0E+00	U34625.1	NT	Human T cell surface glycoprotein CD-6 mRNA, complete cds
6189	18789	31569	12.83	0.0E+00	U34625.1	NT	Human T cell surface glycoprotein CD-6 mRNA, complete cds
6229	18838	31611	1.35	0.0E+00	BE256330.1	EST_HUMAN	601114823F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3355565 5'
6238	18847	31618	1.64	0.0E+00	BE156561.1	EST_HUMAN	QV0-HT0368-090200-089-c09 HT0368 Homo sapiens cDNA
6280	18888	31657	1.54	0.0E+00	BE379007.1	EST_HUMAN	601236276F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608480 5'
6286	18894	31663	1.23	0.0E+00	AU137772.1	EST_HUMAN	AU137772 PLACE1 Homo sapiens cDNA clone PLACE1007201 5'
6306	18913	31687	3.42	0.0E+00	U45982.1	NT	Human G protein-coupled receptor GPR-9-6 gene, complete cds
6334	18940	31717	4.13	0.0E+00	AA204740.1	EST_HUMAN	z461d03.r1 Stragene INT neuron (#837233) Homo sapiens cDNA clone IMAGE:848005 5' similar to TR:G854195 G854195 LEUKOCYTE SURFACE PROTEIN. ;
6335	18941	31718	3.68	0.0E+00	11545913	NT	Homo sapiens xylosyltransferase II (XT2), mRNA
6335	18941	31719	3.66	0.0E+00	11545913	NT	Homo sapiens xylosyltransferase II (XT2), mRNA
6354	18959	31737	0.7	0.0E+00	U07223.1	NT	Human beta2-chimerin mRNA, complete cds
6371	18975	31753	1.87	0.0E+00	11428387	NT	Homo sapiens carcinoembryonic antigen-related cell adhesion molecule 8 (CEACAM8), mRNA
6375	18979	31758	3.62	0.0E+00	BE257173.1	EST_HUMAN	601108532F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350622 5'
6388	18991		0.94	0.0E+00	A1888048.1	EST_HUMAN	1891f10.x1 NC1 CGAP_P128 Homo sapiens cDNA clone IMAGE:2248939 3' similar to TR:Q14839 Q14839 MI-2 PROTEIN. ;
6392	18995	31774	1.39	0.0E+00	L35630.1	NT	Human anion exchanger (AE1) gene, exons 1-20
6401	19004	31782	1.03	0.0E+00	BE797385.1	EST_HUMAN	601587971F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3942329 5'
6401	19004	31783	1.03	0.0E+00	BE797385.1	EST_HUMAN	601587971F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3942329 5'
6411	19014	31786	0.96	0.0E+00	BF357123.1	EST_HUMAN	MR0-HT0823-220800-102-b05 HT0823 Homo sapiens cDNA
6419	19022	31806	1.53	0.0E+00	11435830	NT	Homo sapiens peptide transporter 3 (LOC51286), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6428	19031	31814	0.96	0.0E+00	D55849.1	NT	Human mRNA for alpha mannosidase II isozyme, complete cds
6442	19044	31832	1.11	0.0E+00	AW178142.1	EST_HUMAN	IL3-HT0082-010899-014-A04 HT0082 Homo sapiens cDNA
6462	19063	31848	0.78	0.0E+00	BE674544.1	EST_HUMAN	Ta02a12.x1 NCJ_CGAP_Li24 Homo sapiens cDNA clone IMAGE:3281302 3' similar to SW:Y178_HUMAN
6468	19067	31853	0.96	0.0E+00	7682039	NT	Q14681 HYPOTHETICAL PROTEIN KIAA0178;
6480	19081		8.14	0.0E+00	AV650020.1	EST_HUMAN	Homo sapiens KIAA0285 gene product (KIAA0285), mRNA
6487	19088	31871	3.19	0.0E+00	AW575598.1	EST_HUMAN	AV650020 GLC Homo sapiens cDNA clone GLOCAD09 3'
6490	19091	31874	5.28	0.0E+00	H01255.1	EST_HUMAN	UI-HF-BLD-eco-g-12-0-UI.r1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3058751 3'
6501	19101	31886	3.3	0.0E+00	X15377.1	NT	Y27b03.r1 Soares placenta Nk2HP Homo sapiens cDNA clone IMAGE:149833 5'
6503	19103	31888	1.02	0.0E+00	A1812841.1	EST_HUMAN	Human gene for the light and heavy chains of myeloperoxidase
6509	19109	31894	4.19	0.0E+00	BE735989.1	EST_HUMAN	t257d08.x1 NCJ_CGAP_Ox85 Homo sapiens cDNA clone IMAGE:2282687 3' similar to SW:NTCS_HUMAN
6509	19109	31895	4.19	0.0E+00	BE735989.1	EST_HUMAN	P33796 SODIUM- AND CHLORIDE-DEPENDENT CREATINE TRANSPORTER 2;
6513	19113	31901	0.83	0.0E+00	AW748598.1	EST_HUMAN	601305368F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3639816 5'
6513	19113	31902	0.83	0.0E+00	AW748598.1	EST_HUMAN	601305368F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3639816 5'
6515	19115	31904	167.16	0.0E+00	AU119245.1	EST_HUMAN	MRO-BT0284-221189-002-f11 BT0284 Homo sapiens cDNA
6515	19115	31905	167.16	0.0E+00	AU119245.1	EST_HUMAN	MRO-BT0284-221189-002-f11 BT0284 Homo sapiens cDNA
6519	19119	31910	0.83	0.0E+00	BE780453.1	EST_HUMAN	AU119245 HEMBA1 Homo sapiens cDNA clone HEMBA1005380 5'
6520	19120	31911	0.89	0.0E+00	X92217.1	NT	AU119245 HEMBA1 Homo sapiens cDNA clone HEMBA1005380 5'
6531	19131	31925	1.98	0.0E+00	A1899483.1	EST_HUMAN	601468712F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3871889 5'
6543	19142	31934	2.84	0.0E+00	BE283153.1	EST_HUMAN	H sapiens germline immunoglobulin heavy chain, variable region, (13-2)
6543	19142	31935	2.84	0.0E+00	BE283153.1	EST_HUMAN	ws25c07.x1 NCJ_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2498220 3'
6806	19203	32009	1.05	0.0E+00	AW406348.1	EST_HUMAN	601105344F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887883 5'
6806	19203	32010	1.05	0.0E+00	AW406348.1	EST_HUMAN	601105344F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887883 5'
6834	19230	32034	5.38	0.0E+00	AV719444.1	EST_HUMAN	UI-HF-BLD-eco-h-02-0-UI.r1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3058631 5'
6842	19238	32040	1.02	0.0E+00	BE898340.1	EST_HUMAN	UI-HF-BLD-eco-h-02-0-UI.r1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3058631 5'
6842	19238	32041	1.02	0.0E+00	BE898340.1	EST_HUMAN	AV719444 GLC Homo sapiens cDNA clone GLOCAD08 5'
6845	19241	32044	2.18	0.0E+00	AF190860.1	NT	601681150F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3951301 5'
6848	19244	32046	1.05	0.0E+00	11420658	NT	601681150F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3951301 5'
6855	19251	32053	3.35	0.0E+00	AW163640.1	EST_HUMAN	Homo sapiens low voltage-activated T-type calcium channel alpha 1G splice variant CavT.1a (CACNA1G) mRNA, complete cds
6855	19251	32054	3.35	0.0E+00	AW163640.1	EST_HUMAN	Homo sapiens transformation/transcription domain-associated protein (TRRAP), mRNA
							au88h08.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2784159 5' similar to
							TR:O15390 O15390 GT24. [3] TR:O43840 TR:O43206;
							au88h08.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2784159 5' similar to
							TR:O15390 O15390 GT24. [3] TR:O43840 TR:O43206;

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6659	19255	32057	0.97	0.0E+00	W37163.1	EST_HUMAN	zb20x08.r1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:302828 5' similar to SW:ZN45_HUMAN Q02388 ZINC FINGER PROTEIN 45;
6659	19255	32058	0.97	0.0E+00	W37163.1	EST_HUMAN	zb20x08.r1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:302828 5' similar to SW:ZN45_HUMAN Q02388 ZINC FINGER PROTEIN 45;
6671	19287	32071	1.09	0.0E+00	BE794853.1	EST_HUMAN	601588371F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943504 5'
6678	19274	32078	4.45	0.0E+00	BE798873.1	EST_HUMAN	601587581F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3941847 5'
6682	19278	32081	7.35	0.0E+00	BE888813.1	EST_HUMAN	601612058F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913311 5'
6682	19278	32082	7.35	0.0E+00	BE888813.1	EST_HUMAN	601512058F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913311 5'
6689	19285	32088	3.81	0.0E+00	L24483.1	NT	Human antigen CD27 gene, exons 1-2
6694	19280	32082	2.03	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
6694	19280	32083	2.03	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
6700	19286	32100	3.54	0.0E+00	6005983	NT	Homo sapiens zona pellucida glycoprotein 3A (sperm receptor) (ZP3A), mRNA
6703	19298	32102	3.88	0.0E+00	A638412.1	EST_HUMAN	h31f11.x1 NCL_CGAP_G08 Homo sapiens cDNA clone IMAGE:2242413 3' similar to SW:WNT3_MOUSE P17553 WNT-3 PROTO-ONCOGENE PROTEIN PRECURSOR;
6704	19289	32103	1.36	0.0E+00	L32832.1	NT	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds
6714	19308	32112	0.78	0.0E+00	AW505430.1	EST_HUMAN	U1-HF-BND-ama-c-01-D-UI.r1 NIH_MGC_60 Homo sapiens cDNA clone IMAGE:3081217 5'
6716	19310	32113	3.78	0.0E+00	AA434584.1	EST_HUMAN	zsf52c03.r1 Soares_fetal_fetus_Nb2HF9_9w Homo sapiens cDNA clone IMAGE:773868 5'
6730	19324		1.08	0.0E+00	BF217200.1	EST_HUMAN	601885317F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4103693 5'
6734	19328	32133	1.72	0.0E+00	BE925875.1	EST_HUMAN	QV3-BN0047-300800-278-c08 BN0047 Homo sapiens cDNA
6774	19368	32178	1.98	0.0E+00	AU125928.1	EST_HUMAN	AU125928 NT2RNA Homo sapiens cDNA clone NT2RNA4002430 5'
6776	19368	32180	0.73	0.0E+00	BE701434.1	EST_HUMAN	PM2-NN0174-280700-001-h10 NN0174 Homo sapiens cDNA
6776	19368	32181	0.73	0.0E+00	BE701434.1	EST_HUMAN	PM2-NN0174-280700-001-h10 NN0174 Homo sapiens cDNA
6795	19398	32202	1.28	0.0E+00	BE142363.1	EST_HUMAN	CM0-HT0143-270888-062-c08 HT0143 Homo sapiens cDNA
6815	19406	32222	0.91	0.0E+00	BE008012.1	EST_HUMAN	RCO-BN0121-280300-032-c04 BN0121 Homo sapiens cDNA
6815	19406	32223	0.91	0.0E+00	BE008012.1	EST_HUMAN	RCO-BN0121-280300-032-c04 BN0121 Homo sapiens cDNA
6835	19425	32241	7.25	0.0E+00	BE189131.1	EST_HUMAN	PM3-HT0520-230200-002-c08 HT0520 Homo sapiens cDNA
6837	19427	32243	1.62	0.0E+00	BF085867.1	EST_HUMAN	IL5-GN0032-180900-145-d07 GN0032 Homo sapiens cDNA
6873	19507	32441	3.11	0.0E+00	AA180755.1	EST_HUMAN	zp88d03.r1 Strategene HeLa cell s3 837216 Homo sapiens cDNA clone IMAGE:627282 5'
6882	19517	32452	0.99	0.0E+00	U39573.1	NT	Human salivary peroxidase mRNA, complete cds
6885	19520	32454	0.72	0.0E+00	BE671887.1	EST_HUMAN	744807.x1 NCL_CGAP_G08 Homo sapiens cDNA clone IMAGE:322837 3' similar to TR:Q8Z285 Q8Z285 TEKTN;
6892	19528	32462	6.2	0.0E+00	A1940621.1	EST_HUMAN	IL3-ST0024-230789-001-B01 ST0024 Homo sapiens cDNA
6892	19528	32463	6.2	0.0E+00	A1940621.1	EST_HUMAN	IL3-ST0024-230789-001-B01 ST0024 Homo sapiens cDNA
6902	19536	32474	2.67	0.0E+00	11435826	NT	Homo sapiens CD6 antigen (CD6), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6813	18572	32401	0.84	0.0E+00	ALD4243.1	EST_HUMAN	DKFZp434D2021_r1_434 (synonym: hhs3) Homo sapiens cDNA clone DKFZp434D2021 5'
6816	18575	32404	0.84	0.0E+00	AI188270.1	EST_HUMAN	cc10d01.x1 Soares_NSF_P8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3842080 5'
6821	18580	32409	0.89	0.0E+00	BE734087.1	EST_HUMAN	TR:Q28823 Q28823 TEKIN C1.:
6838	18044	30468	1.22	0.0E+00	BE566381.1	EST_HUMAN	601567370F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842080 5'
6843	18051	30473	13.34	0.0E+00	BE5867889.1	EST_HUMAN	601338977F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3882287 5'
6843	18051	30474	13.34	0.0E+00	BE5867889.1	EST_HUMAN	601443867F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847687 5'
6848	18525	32347	1.75	0.0E+00	BE550162.1	EST_HUMAN	601443867F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847687 5'
6848	18525	32348	1.75	0.0E+00	BE550162.1	EST_HUMAN	7b48f03.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3231581 3' similar to SW:GG95_HUMAN
6870	18547	32371	2.55	0.0E+00	BF088376.1	EST_HUMAN	Q08379 GOLGIN-95.:
6877	18553	32378	2.01	0.0E+00	AA185108.1	EST_HUMAN	Q08379 GOLGIN-95.:
6884	19482		10.79	0.0E+00	11034810	NT	7b48f03.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3231581 3' similar to SW:GG95_HUMAN
6886	19484	32305	1.11	0.0E+00	11431474	NT	Q08379 GOLGIN-95.:
7001	19499	32319	2.35	0.0E+00	BF569905.1	EST_HUMAN	CM1-HT0877-960800-397-g11 HT0877 Homo sapiens cDNA
7008	18508	32325	0.75	0.0E+00	4557384	NT	z23-g03.r1 Soares_NHMPU_S1 Homo sapiens cDNA clone IMAGE:685332 5'
7016	19514		2.49	0.0E+00	J03069.1	NT	Homo sapiens catenin (cadherin-associated protein), delta 2 (neural plakophilin-related arm-repeat protein) (CTNND2), mRNA
7024	19558	32383	4.16	0.0E+00	AF217289.1	NT	Homo sapiens sodium channel, nonvoltage-gated 1, beta (Liddle syndrome) (SCNN1B), mRNA
7024	19558	32384	4.16	0.0E+00	AF217289.1	NT	602185852F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310078 5'
7025	19559	32385	1	0.0E+00	M38113.1	NT	Homo sapiens Bloom syndrome (BLM) mRNA
7036	18058	30479	2.94	0.0E+00	11420775	NT	Homo sapiens MYCL2 gene, complete cds
7039	18059	30481	0.69	0.0E+00	BE256708.1	EST_HUMAN	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
7057	18078	30429	1.11	0.0E+00	AU118478.1	EST_HUMAN	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
7059	18078	30432	4.93	0.0E+00	BE282941.1	EST_HUMAN	Human neurofibromatosis type 1 gene, exon x8
7060	18078	30433	2.1	0.0E+00	Z37976.1	NT	Homo sapiens melanoma antigen, family B, 2 (MAGEB2), mRNA
7060	18078	30434	2.1	0.0E+00	Z37976.1	NT	601115515F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3366330 5'
7061	18080	30435	2.68	0.0E+00	AF257737.1	NT	AU118478 HEMBA1 Homo sapiens cDNA clone HEMBA1003679 5'
7061	18080	30436	2.68	0.0E+00	AF257737.1	NT	601148954F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3501828 5'
7066	18085	30441	1.44	0.0E+00	AF310105.1	NT	H. sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
7071	18043	32480	0.68	0.0E+00	BE782770.1	EST_HUMAN	H. sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
7075	18047	32485	2.59	0.0E+00	BF568905.1	EST_HUMAN	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7079	18051	32490	3.92	0.0E+00	L01978.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7089	19660	32489	0.82	0.0E+00	AL039581.1	EST_HUMAN	DKFZp434D2211_1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434D2211 5'
7089	19660	32500	0.82	0.0E+00	AL039581.1	EST_HUMAN	DKFZp434D2211_1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434D2211 5'
7095	19668	32505	8.1	0.0E+00	BF306998.1	EST_HUMAN	601888823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
7100	19670	32509	2.1	0.0E+00	U41302.1	NT	Human chromosome 10 creatine transporter (SLC8A8) and (CDM) paralogous genes, complete cds
7132	19472	32282	1.1	0.0E+00	AL049784.1	NT	Novel human gene mapping to chromosome 13
7167	19668	32546	0.89	0.0E+00	AU137738.1	EST_HUMAN	AU137738 PLACE1 Homo sapiens cDNA clone PLACE1007120 5'
7167	19668	32547	0.89	0.0E+00	AU137738.1	EST_HUMAN	AU137738 PLACE1 Homo sapiens cDNA clone PLACE1007120 5'
7173	19705	32553	1.43	0.0E+00	AW954808.1	EST_HUMAN	EST368876 MAGC resequences, MAGC Homo sapiens cDNA
7174	19708	32564	1.08	0.0E+00	BE254103.1	EST_HUMAN	601113958F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3354568 5'
7187	19719	32568	1.23	0.0E+00	L01873.1	NT	Human type VI sodium channel alpha polypeptide (SCN4A) gene, exon 14
7195	19726	32578	0.71	0.0E+00	AB007835.1	NT	Homo sapiens mRNA for KIAA0466 protein, partial cds
7195	19726	32577	0.71	0.0E+00	AB007835.1	NT	Homo sapiens mRNA for KIAA0466 protein, partial cds
7201	19732	32584	1.97	0.0E+00	AU133213.1	EST_HUMAN	AU133213 NT2RP4 Homo sapiens cDNA clone NT2RP4001556 5'
7216	19747	32603	0.86	0.0E+00	11428081	NT	Homo sapiens membrane protein CH1 (CH1), mRNA
7221	19752		2.39	0.0E+00	AU143706.1	EST_HUMAN	AU143706 Y78AA1 Homo sapiens cDNA clone Y78AA1002385 5'
7222	19753	32608	1.2	0.0E+00	4758839	NT	Homo sapiens netrin 1 (NTN1), mRNA
7231	19762	32617	1.83	0.0E+00	BE891286.1	EST_HUMAN	601431818F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917164 5'
7231	19762	32618	1.83	0.0E+00	BE891286.1	EST_HUMAN	601431818F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917164 5'
7252	18094	30411	2.27	0.0E+00	AF137288.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
7252	18094	30412	2.27	0.0E+00	AF137288.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
7263	19791	32646	0.78	0.0E+00	BE747231.1	EST_HUMAN	601580948F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3929722 5'
7263	19791	32647	0.78	0.0E+00	BE747231.1	EST_HUMAN	601580948F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3929722 5'
7274	19802	32659	4.97	0.0E+00		NT	Homo sapiens vitamin D (1,25-dihydroxyvitamin D3) receptor (VDR), mRNA
7274	19802	32660	4.97	0.0E+00	11436699	NT	Homo sapiens vitamin D (1,25-dihydroxyvitamin D3) receptor (VDR), mRNA
7302	19830	32688	28.95	0.0E+00	AI128344.1	EST_HUMAN	qc87a07.x1 Soares_placenta_86c8weeks_2Nblp86c9W Homo sapiens cDNA clone IMAGE:1714844 3' similar to SW-ARSO_HUMAN P51689 ARYL SULFATASE D PRECURSOR ; contains element HGR repetitive element ;
7302	19830	32689	28.95	0.0E+00	AI128344.1	EST_HUMAN	qc87a07.x1 Soares_placenta_86c8weeks_2Nblp86c9W Homo sapiens cDNA clone IMAGE:1714844 3' similar to SW-ARSO_HUMAN P51689 ARYL SULFATASE D PRECURSOR ; contains element HGR repetitive element ;
7304	19832	32691	4.05	0.0E+00	11426392	NT	Homo sapiens myosin, heavy polypeptide 8, skeletal muscle, perinatal (MYH8), mRNA
7304	19832	32692	4.05	0.0E+00	11426392	NT	Homo sapiens myosin, heavy polypeptide 8, skeletal muscle, perinatal (MYH8), mRNA
7307	19835		14.06	0.0E+00	BF337375.1	EST_HUMAN	602035089F1 NCI CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4182839 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7309	19837	32895	3.39	0.0E+00	AA128453.1	EST_HUMAN	zr60f08.r1 Stragene muscle 837209 Homo sapiens cDNA clone IMAGE:562801 5' similar to TR:Q808582
7314	19841	32701	0.9	0.0E+00	ALD79497.1	EST_HUMAN	G808582 NEBULIN ;
7314	19841	32702	0.9	0.0E+00	ALD79497.1	EST_HUMAN	DKFZp434B0226_r1 434 (synonym: hhs3) Homo sapiens cDNA clone DKFZp434B0226 5'
7349	19875	32741	1.2	0.0E+00	BE285499.1	EST_HUMAN	DKFZp434B0226_r1 434 (synonym: hhs3) Homo sapiens cDNA clone DKFZp434B0226 5'
7351	19877	32742	0.86	0.0E+00	11427988	NT	601174578F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3528794 5'
7354	19880		2.37	0.0E+00	AU118807.1	EST_HUMAN	Homo sapiens hypothetical protein (FLJ20281), mRNA
7355	19881	32745	1.77	0.0E+00	AF005213.1	NT	AU118807 HEMBA1 Homo sapiens cDNA clone HEMBA1003989 5'
7355	19881	32746	1.77	0.0E+00	AF005213.1	NT	Homo sapiens ankyrin 1 (ANK1) mRNA, complete cds
7365	19891	32754	0.99	0.0E+00	AF245505.1	NT	Homo sapiens ankyrin 1 (ANK1) mRNA, complete cds
7371	19897	32758	8.87	0.0E+00	X70172.1	NT	Homo sapiens adiclin mRNA, complete cds
7373	19899	32760	8.18	0.0E+00	U45448.1	NT	H. sapiens DNA for ZNGP2 pseudogene, exon 4
7373	19899	32761	8.18	0.0E+00	U45448.1	NT	Human P2x1 receptor mRNA, complete cds
7385	19911	32775	0.98	0.0E+00	AW968503.1	EST_HUMAN	Human P2x1 receptor mRNA, complete cds
7387	19913	32777	3.25	0.0E+00	AW968503.1	EST_HUMAN	EST388573 IMAGE: resseques, MAGD Homo sapiens cDNA
7408	19933	32797	1.04	0.0E+00	AF001543.1	EST_HUMAN	EST382588 IMAGE: resseques, MAGA Homo sapiens cDNA
7408	19933	32798	1.04	0.0E+00	AF001543.1	EST_HUMAN	AF001543 Human cDNA (Chandrasekharappa,S.C.) Homo sapiens cDNA clone kappa_200
7408	19933	32799	1.04	0.0E+00	AF001543.1	EST_HUMAN	AF001543 Human cDNA (Chandrasekharappa,S.C.) Homo sapiens cDNA clone kappa_200
7425	19949		0.78	0.0E+00	M60354.1	NT	AF001543 Human cDNA (Chandrasekharappa,S.C.) Homo sapiens cDNA clone kappa_200
7428	19950	32815	0.71	0.0E+00	BE408293.1	EST_HUMAN	Human BTF3 protein homologue gene, complete cds
7451	19975		1.16	0.0E+00	R87430.1	EST_HUMAN	601302879F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3637434 5'
7452	19978	32841	2.37	0.0E+00	AW239328.1	EST_HUMAN	ym88h10.r1 Soares adult brain N2b-4B55Y Homo sapiens cDNA clone IMAGE:166051 5'
7468	19980		1.19	0.0E+00	AU117553.1	EST_HUMAN	xb38a05.y1 NC1_CGAP_Lu31 Homo sapiens cDNA clone IMAGE:2578640 5' similar to TR:Q80850
7470	19982	32855	3.61	0.0E+00	11427135	NT	HNF3FH TRANSCRIPTION FACTOR GENESIS ;
7482	20004	32869	0.68	0.0E+00	AA211663.1	EST_HUMAN	AU117553 HEMBA1 Homo sapiens cDNA clone HEMBA1001681 5'
7488	20011	32877	0.82	0.0E+00	LI2832.1	NT	Homo sapiens glucagon-like peptide 2 receptor (GLP2R), mRNA
7509	20030	32894	0.98	0.0E+00	BF306968.1	EST_HUMAN	zr59f02.r1 Stragene muscle 937209 Homo sapiens cDNA clone IMAGE:562203 5' similar to gb:X03740
7509	20030	32895	0.98	0.0E+00	BF306968.1	EST_HUMAN	MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
7517	20037	32905	1.48	0.0E+00	AU118767.1	EST_HUMAN	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds
7581	20078	32952	4.53	0.0E+00	AT752581.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
							601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
							601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
							AU118767 HEMBA1 Homo sapiens cDNA clone HEMBA1004314 5'
							cn17d05.r1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn17d05 random

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7561	20078	32953	4.53	0.0E+00	AJ752561.1	EST_HUMAN	cn17d05.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn17d05 random
7631	20143	33023	1.45	0.0E+00	AF084205.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, alternatively spliced products, exons 7 through 32 and complete cds
7631	20143	33024	1.45	0.0E+00	AF084205.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, alternatively spliced products, exons 7 through 32 and complete cds
7639	20151	33035	1.03	0.0E+00	U74315.1	EST_HUMAN	HSU74315 Human chromosome 14 Homo sapiens cDNA clone 1-4
7653	20165	33052	0.87	0.0E+00	BE439545.1	EST_HUMAN	HTM1-183F1 HTM1 Homo sapiens cDNA
7654	20166	33053	1.08	0.0E+00	11417342	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A), mRNA
7681	20192	33081	2.91	0.0E+00	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
7687	20196	33084	1	0.0E+00	N76126.1	EST_HUMAN	z88605.e1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:289456 3'
7691	20200	33087	5.26	0.0E+00	BF217905.1	EST_HUMAN	601885465F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4103729 5'
7699	20208	33095	4.27	0.0E+00	AU129622.1	EST_HUMAN	AU129622 NT2RP2 Homo sapiens cDNA clone NT2RP2005913 5'
7716	24769	33111	1.1	0.0E+00	AW069274.1	EST_HUMAN	cr42609.x1 Jla bone marrow stroma Homo sapiens cDNA clone HBMSC_cr42609 3'
7715	24769	33112	1.1	0.0E+00	AW069274.1	EST_HUMAN	cr42609.x1 Jla bone marrow stroma Homo sapiens cDNA clone HBMSC_cr42609 3'
7718	20226	33114	6.48	0.0E+00	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
7725	20233	33121	1.01	0.0E+00	AV759487	EST_HUMAN	AV759487 BM Homo sapiens cDNA clone BMFBGG05 5'
7726	20234	33122	6.72	0.0E+00	BE739870.1	EST_HUMAN	601593156F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3947365 5'
7726	20234	33123	6.72	0.0E+00	BE739870.1	EST_HUMAN	601593156F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3947365 5'
7727	20235	33124	0.81	0.0E+00	6912461	NT	Homo sapiens atrophin-1 interacting protein 1; activin receptor interacting protein 1 (KIAA0705), mRNA
7727	20235	33125	0.81	0.0E+00	6912461	NT	Homo sapiens atrophin-1 interacting protein 1; activin receptor interacting protein 1 (KIAA0705), mRNA
7728	20236	33126	1.02	0.0E+00	AU120424.1	EST_HUMAN	AU120424 HEMBB1 Homo sapiens cDNA clone HEMBB1000655 5'
7728	20236	33127	1.02	0.0E+00	AU120424.1	EST_HUMAN	AU120424 HEMBB1 Homo sapiens cDNA clone HEMBB1000655 5'
7757	20265	33160	1.73	0.0E+00	BE787610.1	EST_HUMAN	601481713F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3884258 5'
7767	20266	33161	1.73	0.0E+00	BE787610.1	EST_HUMAN	601481713F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3884258 5'
7767	20275	33175	0.8	0.0E+00	AW402189.1	EST_HUMAN	U1HF-BK0-est-c-07-0.U1.1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3054733 5'
7776	20285	33182	0.9	0.0E+00	AW69044.1	EST_HUMAN	EST380119 MAGE resequences, MAGJ Homo sapiens cDNA
7786	20338	33246	1.97	0.0E+00	AU133187.1	EST_HUMAN	AU133187 NT2RP4 Homo sapiens cDNA clone NT2RP4001507 5'
7840	20382		0.51	0.0E+00	BF217200.1	EST_HUMAN	601885317F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4103693 5'
7853	20395	33300	0.85	0.0E+00	BE313013.1	EST_HUMAN	601150347F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503050 5'
7864	20406	33313	1.18	0.0E+00	AA148791.1	EST_HUMAN	zad01c08.l1 Stratagene colon (#637204) Homo sapiens cDNA clone IMAGE:568410 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7877	20419	33327	0.8	0.0E+00	BF028628.1	EST_HUMAN	601872310F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3955131 5'
7880	20432	33341	0.51	0.0E+00	AA017021.1	EST_HUMAN	z633908.1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:360831 5'
7907	20449	33358	2.32	0.0E+00	BE736048.1	EST_HUMAN	601305688F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3638903 5'
7923	20465	33372	3.32	0.0E+00	M34872.1	NT	Human amyloid-beta protein (APP) gene, exon 11
7923	20465	33373	3.32	0.0E+00	M34872.1	NT	Human amyloid-beta protein (APP) gene, exon 11
7953	20495	33404	0.77	0.0E+00	AW674581.1	EST_HUMAN	b634802.Y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2885123 5' similar to TR:O64652 O64652
7953	20485	33405	0.77	0.0E+00	AW674581.1	EST_HUMAN	b634802.Y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2885123 5' similar to TR:O64652 O64652
7860	20502	33411	3.05	0.0E+00	AA397551.1	EST_HUMAN	z811b04.1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482
7862	20504	33412	0.63	0.0E+00	AW387131.1	EST_HUMAN	G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT) ;
7865	20507		0.53	0.0E+00	AB020691.1	NT	MRO-ST0031-061099-003-e11 ST0031 Homo sapiens cDNA
7868	20508	33414	7.21	0.0E+00	AU142402.1	EST_HUMAN	Homo sapiens mRNA for KIAA0894 protein, partial cds
7970	20512	33416	0.97	0.0E+00	BE388421.1	EST_HUMAN	AU142402 Y78AA1 Homo sapiens cDNA clone Y78AA1000277 5'
7970	20512	33419	0.97	0.0E+00	BE388421.1	EST_HUMAN	601285550F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607237 5'
7895	20527	33433	0.52	0.0E+00	7857276	NT	601285550F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607237 5'
7897	20529	33435	0.87	0.0E+00	W95278.1	EST_HUMAN	Homo sapiens killer cell immunoglobulin-like receptor, two domains, short cytoplasmic tail, 1 (KIR2DS1), mRNA
7897	20529	33436	0.87	0.0E+00	W95278.1	EST_HUMAN	z605d01.1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:358081 5'
7899	20531		17.03	0.0E+00	BF673086.1	EST_HUMAN	z605d01.1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:358081 5'
7893	20535		1.38	0.0E+00	AU134114.1	EST_HUMAN	602153008F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4284128 5'
8007	20549	33453	2.35	0.0E+00	BF525534.1	EST_HUMAN	AU134114 OVARC1 Homo sapiens cDNA clone OVARC1001286 5'
8007	20549	33454	2.35	0.0E+00	BF525534.1	EST_HUMAN	602088632F1 NCI_CGAP_Brr64 Homo sapiens cDNA clone IMAGE:4212727 5'
8037	20579	33484	1.88	0.0E+00	AL120124.1	EST_HUMAN	602088632F1 NCI_CGAP_Brr64 Homo sapiens cDNA clone IMAGE:4212727 5'
8037	20579	33485	1.88	0.0E+00	AL120124.1	EST_HUMAN	DKFZp781P082.1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp781P082 5'
8077	20619		1.82	0.0E+00	BE877693.1	EST_HUMAN	DKFZp781P082.1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp781P082 5'
8088	20639	33550	2.09	0.0E+00	AW500549.1	EST_HUMAN	601485254F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3887773 5'
8108	20847	33558	11.19	0.0E+00	AW157233.1	EST_HUMAN	UI-HF-BNO-ak-L01-Q-UJ1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077488 5'
8123	20864	33574	0.65	0.0E+00	AW072395.1	EST_HUMAN	z683b08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783789 3' similar to
8141	20882	33584	1.05	0.0E+00	11421722	NT	TR:O60463 O60463 TYPE-2 PHOSPHATIDIC ACID PHOSPHOHYDROLASE [1];
8144	20885	33597	0.75	0.0E+00	W01616.1	EST_HUMAN	z607d12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2567639 3' similar to contains element OFF repetitive element;
							Homo sapiens centrosomal protein 2 (CEP2), mRNA
							z636d05.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:284633 5'

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8146	20687	33589	1.55	0.0E+00	BE745597.1	EST_HUMAN	601578185F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926898 5'
8146	20687	33600	1.55	0.0E+00	BE745597.1	EST_HUMAN	601578185F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926898 5'
8158	20689	33613	1.32	0.0E+00	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
8178	20719	33634	6.51	0.0E+00	D45032.1	NT	Human DNA for ceruloplasmin, exon 5
8198	20739	33651	1.47	0.0E+00	A1367350.1	EST_HUMAN	q95c12.x1 NCL_CGAP_U12 Homo sapiens cDNA clone IMAGE:1988334 3' similar to TR:Q14673 Q14673
8211	20752	33666	3.14	0.0E+00	BE674157.1	EST_HUMAN	KUAA0164 PROTEIN ; 7678604.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3278862 3' similar to TR:O65793 O65793
8213	20764	33668	1.31	0.0E+00	A1885671.1	EST_HUMAN	W60510.x1 NCL_CGAP_Bn25 Homo sapiens cDNA clone IMAGE:2428275 3' similar to SW:COGT_HUMAN P50281 MATRIX METALLOPROTEINASE-14 PRECURSOR ;
8224	20765	33682	1.38	0.0E+00	BE563650.1	EST_HUMAN	601334780F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3688655 5'
8224	20765	33683	1.38	0.0E+00	BE563650.1	EST_HUMAN	601334780F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3688655 5'
8231	20772	33682	1.63	0.0E+00	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
8231	20772	33683	1.63	0.0E+00	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
8233	20774	33685	1.7	0.0E+00	AA403192.1	EST_HUMAN	z66802.f1 Soares fetal Nb2HF8_9w Homo sapiens cDNA clone IMAGE:758619 5' similar to TR:G1304132 G1304132 TPRD. ;
8233	20774	33686	1.7	0.0E+00	AA403192.1	EST_HUMAN	z66802.f1 Soares fetal Nb2HF8_9w Homo sapiens cDNA clone IMAGE:758619 5' similar to TR:G1304132 G1304132 TPRD. ;
8275	20816		4.36	0.0E+00	AA398511.1	EST_HUMAN	z173408.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:727858 3' similar to gb:S86855
8283	20824	33745	0.5	0.0E+00	BE637593.1	EST_HUMAN	PROHIBITIN (HUMAN);
8284	20825	33746	1.22	0.0E+00	AW384874.1	EST_HUMAN	RC2-FN0094-120600-013-h07 FN0094 Homo sapiens cDNA
8284	20825	33747	1.22	0.0E+00	AW384874.1	EST_HUMAN	QV3-DT0045-221288-046-c07 DT0045 Homo sapiens cDNA
8303	20844	33766	1.24	0.0E+00	BE612586.1	EST_HUMAN	QV3-DT0045-221288-048-c07 DT0045 Homo sapiens cDNA
8303	20844	33767	1.24	0.0E+00	BE612586.1	EST_HUMAN	601452412F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3656179 5'
8318	20859	33764	1.26	0.0E+00	AL163209.2	NT	601452412F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3656179 5'
8318	20859	33765	1.26	0.0E+00	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C008
8326	20867	33760	0.76	0.0E+00	A1884477.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C009
8333	20874	33768	0.93	0.0E+00	AA502294.1	EST_HUMAN	wm33a11.x1 NCL_CGAP_U4 Homo sapiens cDNA clone IMAGE:2437724 3' similar to TR:O75457 O75457
8338	20879		0.84	0.0E+00	11416700	NT	CYTOSOLIC PHOSPHOLIPASE A2-GAMMA ;
8345	20886	33807	1.33	0.0E+00	A1580780.1	EST_HUMAN	nc25d10.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:882259 3' similar to TR:G1138434
8348	20889		1.86	0.0E+00	BE860797.1	EST_HUMAN	G1138434 KIAA0187 PROTEIN ; Homo sapiens protocadherin beta 3 (PCDH3), mRNA ta04f11.x1 Soares pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:2043117 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8374	20914	33833	0.61	0.0E+00	AW245765.1	EST_HUMAN	2822701.Sprime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822701 5'
8374	20914	33834	0.61	0.0E+00	AW245765.1	EST_HUMAN	2822701.Sprime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822701 5'
8375	20915	33835	2.27	0.0E+00	4758695	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
8375	20915	33836	2.27	0.0E+00	4758695	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
8376	20918	33838	0.6	0.0E+00	U88084.1	NT	Homo sapiens zinc finger protein (ZNF165), gene, exons 2 and 3
8376	20918	33839	0.6	0.0E+00	U88084.1	NT	Homo sapiens zinc finger protein (ZNF165), gene, exons 2 and 3
8443	20983	33868	0.7	0.0E+00	AJ251760.1	NT	Homo sapiens NESP55, GNAS1 antisense (partial) and XLaphs (partial) genes
8448	20988	33904	3.77	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
8448	20988	33905	3.77	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
8448	20988	33906	3.77	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
8463	21003	33920	1.07	0.0E+00	U82978.1	NT	Human immunoglobulin-like transcript-3 mRNA, complete cds
8502	21041	33962	0.88	0.0E+00	AF022855.1	NT	Homo sapiens cep250 centrosome associated protein mRNA, complete cds
8502	21041	33963	0.88	0.0E+00	AF022855.1	NT	Homo sapiens cep250 centrosome associated protein mRNA, complete cds
8505	21044	33965	0.89	0.0E+00	AU131671.1	EST_HUMAN	AU131671 NT2RP3 Homo sapiens cDNA clone NT2RP3003016 5'
8520	21059	33982	0.6	0.0E+00	11426572	NT	Homo sapiens immunoglobulin superfamily, member 2 (IGSF2), mRNA
8524	21063		1.84	0.0E+00	AW513513.1	EST_HUMAN	xa48e01.x1 NCI CGAP_UH1 Homo sapiens cDNA clone IMAGE:2707032 3' similar to gb:M14123_cds4
8526	21065		0.64	0.0E+00	BE783232.1	EST_HUMAN	RETROVIRUS-RELATED POL POLYPROTEIN (HUMAN);
8527	21068	33985	16.45	0.0E+00	D52650.1	EST_HUMAN	601472166F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3874912 5'
8557	21086	34017	3.88	0.0E+00	BE378465.1	EST_HUMAN	HUM084C02B Clontech human fetal brain polyA+ mRNA (#6835) Homo sapiens cDNA clone GEN-084C02 5'
8563	21102	34021	2.84	0.0E+00	AA410545.1	EST_HUMAN	601238498F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608709 5'
8565	21104		2.44	0.0E+00	BF313948.1	EST_HUMAN	Z32604.J1 Scores ovary tumor NBHOT Homo sapiens cDNA clone IMAGE:724062 5'
8572	21111	34030	0.85	0.0E+00		NT	601800571F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4129744 5'
8576	21115	34034	1.28	0.0E+00	AW139873.1	EST_HUMAN	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3 (LILRB3), mRNA
8576	21115	34035	1.28	0.0E+00	AW139873.1	EST_HUMAN	UH-H-BH1-adr-e-12-0-UJ.s1 NCI CGAP Sub3 Homo sapiens cDNA clone IMAGE:2717687 3'
8581	21120		0.82	0.0E+00	AK640190.1	EST_HUMAN	UH-H-BH1-adr-e-12-0-UJ.s1 NCI CGAP Sub3 Homo sapiens cDNA clone IMAGE:2717687 3'
8600	21139	34053	1.78	0.0E+00	BF377897.1	EST_HUMAN	wa30b10.x1 NCI CGAP_Kd111 Homo sapiens cDNA clone IMAGE:2286579 3' similar to TR-O15044
8608	21147	34063	0.55	0.0E+00	AL163301.2	NT	O15044 KIAA0335 ;
8614	21153	34067	2.14	0.0E+00	BE260272.1	EST_HUMAN	CKM1-TN0141-250600-438-b08 TN0141 Homo sapiens cDNA
8619	21158	34071	2.58	0.0E+00	BF700165.1	EST_HUMAN	Homo sapiens chromosome 21 segment H321C101
8619	21158	34072	2.58	0.0E+00	BF700165.1	EST_HUMAN	601150051F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502838 5'
							602127684F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4284542 5'
							602127684F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4284542 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8619	21158	34073	2.68	0.0E+00	BF700166.1	EST_HUMAN	602127684F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4284542 5'
8633	21172	34080	0.83	0.0E+00	AA58722.1	EST_HUMAN	IK13H11.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2150849 3'
8680	21189	34117	2.45	0.0E+00	AL449770.1	EST_HUMAN	AL449770 Homo sapiens fetal brain (Starvrides GS) Homo sapiens cDNA
8687	21208	34123	18.43	0.0E+00	AA962527.1	EST_HUMAN	cr80g02.s1 NCI CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1602184 3' similar to gb:M38072 80S
8673	21212	34131	4.67	0.0E+00	10947037	NT	RIBOSOMAL PROTEIN L7A (HUMAN);
8673	21212	34132	4.67	0.0E+00	10947037	NT	Homo sapiens ankryth 1, erythrocytic (ANK1), transcript variant 1, mRNA
8687	21238	34159	1.28	0.0E+00	Y11107.3	NT	Homo sapiens ankryth 1, erythrocytic (ANK1), transcript variant 1, mRNA
8688	21238	34161	1.78	0.0E+00	BE278917.1	EST_HUMAN	Homo sapiens ITGB4 gene for Integrin beta 4 subunit, exons 3-41
8708	21247		4.02	0.0E+00	AV718377.1	EST_HUMAN	601158330F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139734 5'
8715	21254	34175	3.11	0.0E+00	AW337277.1	EST_HUMAN	AV718377 FHTB Homo sapiens cDNA clone FHTBAAF11 5'
8721	21260	34180	1.42	0.0E+00	AU124051.1	EST_HUMAN	xw73c07.x1 NCI CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2833644 3' similar to gb:X63587
8766	21335	34280	0.9	0.0E+00	AU140704.1	EST_HUMAN	INTEGRIN BETA-4 SUBUNIT PRECURSOR (HUMAN);
8806	21345	34289	0.54	0.0E+00	AB007823.1	NT	AU124051 NT2RM2 Homo sapiens cDNA clone NT2RM2001575 5'
8810	21349	34272	0.6	0.0E+00	R17132.1	EST_HUMAN	AU140704 PLACE4 Homo sapiens cDNA clone PLACE4000089 5'
8810	21349	34273	0.6	0.0E+00	R17132.1	EST_HUMAN	Homo sapiens mRNA for KIAA0454 protein, partial cds
8814	21353	34275	3.85	0.0E+00	AW592233.1	EST_HUMAN	Yp08e09.t1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:31674 5'
8814	21353	34276	3.85	0.0E+00	AW592233.1	EST_HUMAN	Yp08e09.t1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:31674 5'
8849	21368	34311	0.5	0.0E+00	AU128804.1	EST_HUMAN	Hf48a09.x1 Soares NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2935088 3'
8859	21368	34321	1.27	0.0E+00	AV714764.1	EST_HUMAN	Hf48a09.x1 Soares NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2935088 3'
8874	21413	34335	2.6	0.0E+00	AL040428.1	EST_HUMAN	AU128804 NT2RP2 Homo sapiens cDNA clone NT2RP2004245 5'
8874	21413	34336	2.6	0.0E+00	AL040428.1	EST_HUMAN	AV714764 DCB Homo sapiens cDNA clone DCBAUA06 5'
8880	21418	34342	1.55	0.0E+00	AF133901.1	NT	DKFZp434C1814_s1 434 (synonym: hbs3) Homo sapiens cDNA clone DKFZp434C1814 3'
8882	21420	34345	1.68	0.0E+00	AB040945.1	NT	DKFZp434C1814_s1 434 (synonym: hbs3) Homo sapiens cDNA clone DKFZp434C1814 3'
8889	21427	34352	0.54	0.0E+00	BF675505.1	EST_HUMAN	Homo sapiens killer inhibitory receptor 2-2-1 (KIR221) and killer inhibitory receptor 2-2-2 (KIR222) genes, partial cds
8891	21428		0.97	0.0E+00	BF058288.1	EST_HUMAN	Homo sapiens mRNA for KIAA1512 protein, partial cds
8821	21458	34377	6.2	0.0E+00	11422857	NT	602138483F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4274708 5'
8830	21468	34388	1.15	0.0E+00	K01241.1	NT	7K28b03.x1 NCI CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3470692 3' similar to TR:O38448 O38448 S GAG ;
8837	21475	34395	4.14	0.0E+00	AB020630.1	NT	Homo sapiens tumor protein p73 (TP73), mRNA
8837	21475	34396	4.14	0.0E+00	AB020630.1	NT	Human lg rearranged H-chain epsilon-3 pseudogene, constant region
8842	21480	34402	1.61	0.0E+00	AV660738.1	EST_HUMAN	Homo sapiens mRNA for KIAA0823 protein, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8848	21488	34408	3.39	0.0E+00	7706838	NT	Homo sapiens polycystin-L (PKDL), mRNA
8853	21491	34413	2.58	0.0E+00	BE783328.1	EST_HUMAN	601588304F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3942553 5'
8854	21492	34414	0.58	0.0E+00	AB033077.1	NT	Homo sapiens mRNA for KIAA1251 protein, partial cds
8854	21492	34415	0.58	0.0E+00	AB033077.1	NT	Homo sapiens mRNA for KIAA1251 protein, partial cds
8868	21504	34437	1.07	0.0E+00	BT3837.1	EST_HUMAN	y03h08.t1 Sources fetal liver spleen 1NF1.S Homo sapiens cDNA clone IMAGE:232787 5'
8876	21514	34437	4.52	0.0E+00	BE315402.1	EST_HUMAN	601141118F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
8876	21514	34438	4.52	0.0E+00	BE315402.1	EST_HUMAN	601141119F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
8888	21524	34453	0.63	0.0E+00	BE612721.1	EST_HUMAN	601452582F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3856100 5'
8888	21524	34454	0.63	0.0E+00	BE612721.1	EST_HUMAN	601452582F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3856100 5'
8889	21527	34458	0.58	0.0E+00	M80988.1	NT	Human polymorphic loci in Xq28
8891	21528	34458	1.84	0.0E+00	X14786.1	NT	Human mRNA for GABA-A receptor, alpha 1 subunit
9011	21548	34477	2.5	0.0E+00	A001395.1	EST_HUMAN	ar29e04.x1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:1700084 3'
9016	21553	34481	1.82	0.0E+00	A1854607.1	EST_HUMAN	wq34a12.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2473150 3' similar to SW-MG83_HUMAN
9021	21558	34488	4.57	0.0E+00	9258595	NT	O15480 MELANOMA-ASSOCIATED ANTIGEN B3 ;
9031	21568	34487	2.1	0.0E+00	AW958311.1	EST_HUMAN	Homo sapiens protocadherin alpha 8 (PCDH8), mRNA
9041	21578	34507	2.81	0.0E+00	0635487	NT	EST370381 IMAGE sequences, MAGE Homo sapiens cDNA
9056	21593	34523	1.13	0.0E+00	AU142682.1	EST_HUMAN	Human endogenous retrovirus, complete genome
9070	21607	34538	1.25	0.0E+00	11436885	NT	AU142882 Y78AA1 Homo sapiens cDNA clone Y78AA1000678 5'
9071	21608	34538	0.9	0.0E+00	BE410788.1	EST_HUMAN	Homo sapiens MAP-kinase activating death domain (MADD), mRNA
9085	21621	34557	1.69	0.0E+00	BF002024.1	EST_HUMAN	601301876F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636183 5'
9089	21635	34573	0.83	0.0E+00	AB011150.1	NT	7g97h12.x1 NCI_CGAP_Co16 Homo sapiens cDNA clone IMAGE:3314471 3' similar to TR-Q8UH82
9100	21638	34574	7.17	0.0E+00	BE794823.1	EST_HUMAN	Homo sapiens mRNA for KIAA0578 protein, partial cds
9104	21640	34578	0.52	0.0E+00	BE810282.1	EST_HUMAN	601589284F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943463 5'
9104	21640	34580	0.52	0.0E+00	BE810292.1	EST_HUMAN	RC3-PT0151-280000-011-c05 PT0151 Homo sapiens cDNA
9107	21643	34583	1.17	0.0E+00	AU136229.1	EST_HUMAN	RC3-PT0151-280000-011-c05 PT0151 Homo sapiens cDNA
9112	21648	34588	1.18	0.0E+00	BE883843.1	EST_HUMAN	AU136229 PLACE1 Homo sapiens cDNA clone PLACE1003804 5'
9112	21648	34589	1.18	0.0E+00	BE883843.1	EST_HUMAN	601510247F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911888 5'
9130	21665	34605	0.79	0.0E+00	AB011166.1	NT	601510247F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911888 5'
9133	21668	34608	1.64	0.0E+00	AA344801.1	EST_HUMAN	Homo sapiens mRNA for KIAA0594 protein, partial cds
9133	21668	34610	1.64	0.0E+00	AA344801.1	EST_HUMAN	EST50505 Gall bladder 1 Homo sapiens cDNA 5' end
9188	21705	34647	0.85	0.0E+00	AW673488.1	EST_HUMAN	EST50505 Gall bladder 1 Homo sapiens cDNA 5' end be54d08.y9 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2800367 5' similar to TR-O60275 O60275 KIAA0522 PROTEIN ;

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	RF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9188	21705	34648	0.85	0.0E+00	AW673468.1	EST_HUMAN	ba54408.x3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900367 5' similar to TR:060275 060275 KIAA0522 PROTEIN ;
9222	21738	34680	3.48	0.0E+00	BE207063.1	EST_HUMAN	bc09705.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823873 5' similar to gb:U35049 Mus musculus Bcl-xL mRNA, complete cds (MOUSE);
9222	21738	34681	3.48	0.0E+00	BE207063.1	EST_HUMAN	bc09705.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823873 5' similar to gb:U35049 Mus musculus Bcl-xL mRNA, complete cds (MOUSE);
9233	21955	34904	2.35	0.0E+00	BF348013.1	EST_HUMAN	602023150F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4158300 5'
9268	21794	34743	2.8	0.0E+00	BE712516.1	EST_HUMAN	QV2-HT0898-250700-282408 HT0898 Homo sapiens cDNA
9288	21889	34846	0.98	0.0E+00	BF034377.1	EST_HUMAN	601455116F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3859035 5'
9288	21889	34847	0.98	0.0E+00	BF034377.1	EST_HUMAN	601455116F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3859035 5'
9305	21905	34854	0.53	0.0E+00	A1808351.1	EST_HUMAN	RC-BT108-040390-032 BT108 Homo sapiens cDNA
9308	21908	34856	1.54	0.0E+00	5803069	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 5 (LILRB5), mRNA
9308	21908	34857	1.54	0.0E+00	5803069	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 5 (LILRB5), mRNA
9317	21631	34782	1.98	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120_r1 434 (synonym: hbs3) Homo sapiens cDNA clone DKFZp434L0120 5'
9352	21896	34816	2.17	0.0E+00	A1088043.1	EST_HUMAN	aw60401.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:1651249 3' similar to TR:Q14877 KIAA0171 PROTEIN ;
9359	20298	33198	0.83	0.0E+00	BF306962.1	EST_HUMAN	601892245F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4138066 5'
9361	20300	33199	2.28	0.0E+00	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
9361	20300	33200	2.28	0.0E+00	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
9363	20302	33203	18.79	0.0E+00	A1290609.1	EST_HUMAN	qm08a08.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1881288 3' similar to SW:RL2B_HUMAN P29316 60S RIBOSOMAL PROTEIN L23A ;
9363	20302	33204	18.79	0.0E+00	A1290609.1	EST_HUMAN	qm08a08.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1881288 3' similar to SW:RL2B_HUMAN P29316 60S RIBOSOMAL PROTEIN L23A ;
9364	20303	33205	6.56	0.0E+00	AW953636.1	EST_HUMAN	EST368026 IMAGE resequencing, MAGC Homo sapiens cDNA
9391	21814	34763	3.79	0.0E+00	AF153488.1	NT	Homo sapiens polycystic kidney disease 2-like protein (PKD2L) gene, exon 8
9394	21817	34767	0.81	0.0E+00	BE885128.1	EST_HUMAN	601510882F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912165 5'
9394	21817	34768	0.81	0.0E+00	BE885128.1	EST_HUMAN	601510882F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912165 5'
9403	21912		19.73	0.0E+00	BE258826.1	EST_HUMAN	601108942F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350722 5'
9408	21915	34864	1.36	0.0E+00	BE781382.1	EST_HUMAN	601468828F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870007 5'
9408	21915	34865	1.36	0.0E+00	BE781382.1	EST_HUMAN	601468828F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870007 5'
9408	21917	34866	29.88	0.0E+00	AW163779.1	EST_HUMAN	au86cd04.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783142 5' similar to gb:A38072 60S RIBOSOMAL PROTEIN L7A (HUMAN);

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9428	21937	34888	3	0.0E+00	BE268191.1	EST_HUMAN	601145054F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3160477 5'
9446	21972	34922	4.5	0.0E+00	CO6158.1	EST_HUMAN	CO6158 Human pancreatic islet Homo sapiens cDNA clone hbc5605
9446	21972	34923	4.5	0.0E+00	CO6158.1	EST_HUMAN	CO6158 Human pancreatic islet Homo sapiens cDNA clone hbc5605
9448	21974	34928	2.7	0.0E+00	BE748216.1	EST_HUMAN	601578683F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3827548 5'
9458	21984	34938	2.82	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9458	21984	34937	2.82	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9458	21984	34938	2.82	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9478	21877	34824	1.88	0.0E+00	BE900549.1	EST_HUMAN	601673425F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3956238 5'
9496	21986	34952	0.78	0.0E+00	AV701829	EST_HUMAN	AV701829 ADB Homo sapiens cDNA clone ADBBYH01 5'
9508	22008	34965	2.38	0.0E+00	AF019084.1	NT	Homo sapiens keratin 2a (KRT2E) gene, complete cds
9508	22008	34968	2.38	0.0E+00	AF019084.1	NT	Homo sapiens keratin 2a (KRT2E) gene, complete cds
9540	22040	35001	1.32	0.0E+00	BE082877.1	EST_HUMAN	RC2-BT0842-130300-017-g01 BT0842 Homo sapiens cDNA
9559	22058	35021	1.88	0.0E+00	AW500283.1	EST_HUMAN	UI-HIF-BN0-akg-b-12-0-UJ.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076943 5'
9559	22058	35022	1.88	0.0E+00	AW500283.1	EST_HUMAN	UI-HIF-BN0-akg-b-12-0-UJ.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076943 5'
9568	22068	35028	1.75	0.0E+00	AF028308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families
9568	22068	35028	1.75	0.0E+00	AF028308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families
9570	22070	35030	0.72	0.0E+00	BE783272.1	EST_HUMAN	601470824F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3874037 5'
9570	22070	35031	0.72	0.0E+00	BE783272.1	EST_HUMAN	601470824F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3874037 5'
9578	22078	35043	1.14	0.0E+00	W56829.1	EST_HUMAN	zid16e11.r1 Soares_fetal_heart_NB-H18W Homo sapiens cDNA clone IMAGE:340844 5'
9578	22078	35044	1.14	0.0E+00	W56829.1	EST_HUMAN	zid16e11.r1 Soares_fetal_heart_NB-H18W Homo sapiens cDNA clone IMAGE:340844 5'
9591	22091	35055	1.05	0.0E+00	AB035358.1	NT	Homo sapiens mRNA for neuridin L-alpha protein, complete cds
9595	22095		0.84	0.0E+00	AI124780.1	EST_HUMAN	am58a11.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1538548 3'
9597	22097	35060	2.65	0.0E+00	AW500528.1	EST_HUMAN	UI-HIF-BN0-akg-c-07-0-UJ.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077364 5'
9640	22140	35107	1.48	0.0E+00	AF009688.1	NT	Multiple sclerosis associated retrovirus polyprotein (pol) mRNA, partial cds
9668	22165	35138	2.21	0.0E+00	S78488.1	NT	AIGF=androgen-induced growth factor AIGF [human, placenta, Genomic/mRNA, 488 nt, segment 5 of 5]
9668	22165	35139	2.21	0.0E+00	S78488.1	NT	AIGF=androgen-induced growth factor AIGF [human, placenta, Genomic/mRNA, 488 nt, segment 5 of 5]
9689	22188	35144	2.54	0.0E+00	BE563320.1	EST_HUMAN	601334603F1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3688880 5'
9689	22188	35161	1.5	0.0E+00	AW363135.1	EST_HUMAN	CM2-CT0311-301189-043-h11 CT0311 Homo sapiens cDNA
9708	22208	35179	0.91	0.0E+00	11438432	NT	Homo sapiens multimerin (MMRN), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9709	22207	35180	0.74	0.0E+00	11424387	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3 (LILRB3), mRNA
9718	22216	35180	0.83	0.0E+00	BE206710.1	EST_HUMAN	b28601.x1 NIH_MGC_5 Homo sapiens cDNA clone IMAGE:2884000 3'
9733	22231	35208	2.41	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004280 5'
9733	22231	35209	2.41	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004280 5'
9742	22240	35221	1.45	0.0E+00	AW500336.1	EST_HUMAN	UI-HF-BP0p-4r-05-Q-JL1 NIH_MGC_51 Homo sapiens cDNA clone IMAGE:3072897 5'
9748	22246	35227	19.68	0.0E+00	BE740490.1	EST_HUMAN	601595559F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3949383 5'
9748	22246	35228	19.68	0.0E+00	BE740490.1	EST_HUMAN	601595559F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3949383 5'
9761	22259	35242	2.32	0.0E+00	7892067	NT	Homo sapiens KIAA0345 gene product (KIAA0345), mRNA
9779	22277	35262	1.98	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L0120 5'
9784	22282	35268	0.71	0.0E+00	AL041094.2	EST_HUMAN	DKFZp434B2416_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434B2416 5'
9784	22282	35275	2.32	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004280 5'
9785	22283	35276	2.48	0.0E+00	AF152308.1	NT	Homo sapiens protocadherin alpha 12 (PCDH-alpha12) mRNA, complete cds
9822	22320	35304	2.61	0.0E+00	AF009220.1	NT	Homo sapiens leukocyte immunoglobulin-like receptor-1 mRNA, complete cds
9822	22320	35305	2.61	0.0E+00	AF009220.1	NT	Homo sapiens leukocyte immunoglobulin-like receptor-1 mRNA, complete cds
9838	22336	35318	3.23	0.0E+00	BF062898.1	EST_HUMAN	MR4-TN0114-110800-101-e04 TN0114 Homo sapiens cDNA
9865	22362	35342	2.74	0.0E+00	BE280793.1	EST_HUMAN	601155227F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138798 5'
9874	22371	35348	8.19	0.0E+00	BE388700.1	EST_HUMAN	601286351F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3613045 5'
9874	22371	35349	8.19	0.0E+00	BE388700.1	EST_HUMAN	601286351F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3613045 5'
9883	22380	35355	9.02	0.0E+00	AW236289.1	EST_HUMAN	cn72501.x1 NCJ CGAP_CML1 Homo sapiens cDNA clone IMAGE:2688977 3' similar to gb:202152_cds1 L-
9884	22381	35356	0.92	0.0E+00	AA341305.1	EST_HUMAN	LACTATE DEHYDROGENASE M CHAIN (HUMAN);
9883	22380	35368	0.5	0.0E+00	11427235	NT	EST46740 Fetal kidney II Homo sapiens cDNA 5' and
9818	22412	35387	0.79	0.0E+00	AW964113.1	EST_HUMAN	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
9829	22425	35398	6.82	0.0E+00	AU143873.1	EST_HUMAN	EST376186 IMAGE resequences, MAGH Homo sapiens cDNA
9829	22425	35399	6.82	0.0E+00	AU143873.1	EST_HUMAN	AU143873 Y78AA1 Homo sapiens cDNA clone Y78AA1002307 5'
9832	22428	35402	3.44	0.0E+00	AF072408.1	NT	AU143873 Y78AA1 Homo sapiens cDNA clone Y78AA1002307 5'
9835	22430	35404	2.52	0.0E+00	11421001	NT	Homo sapiens killer cell inhibitory receptor KIRCI gene, exons 2, 3, and 4
9835	22430	35405	2.52	0.0E+00	11421001	NT	Homo sapiens HEF like Protein (HEFL), mRNA
9868	22463	35447	3.56	0.0E+00	AU136837.1	EST_HUMAN	Homo sapiens HEF like Protein (HEFL), mRNA
9868	22463	35448	3.55	0.0E+00	AU136837.1	EST_HUMAN	AU136837 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'
9884	22478	35462	2.1	0.0E+00	AJ265844.1	NT	AU136837 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'
9884	22478	35463	2.1	0.0E+00	AJ265844.1	NT	Homo sapiens partial RANBP7 gene for RANBP7/importin7 and partial ZNF143 gene
9889	22484	35470	0.92	0.0E+00	AV695712.1	EST_HUMAN	Homo sapiens partial RANBP7 gene for RANBP7/importin7 and partial ZNF143 gene

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9888	22484	35471	0.92	0.0E+00	AV895712.1	EST_HUMAN	AV895712 GKX Homo sapiens cDNA clone GKCDXA07 5'
9889	22490	35478	0.57	0.0E+00	AF072408.1	NT	Homo sapiens killer cell inhibitory receptor KIRCI gene, exons 2, 3, and 4
9897	22482	35481	2.78	0.0E+00	AA196387.1	EST_HUMAN	zp87h11.11 Stratiogene muscle 837208 Homo sapiens cDNA clone IMAGE:628187 5'
10020	22616	35508	1.61	0.0E+00	AA131248.1	EST_HUMAN	231101.11 Soares_pregnant_uterus_NHPU Homo sapiens cDNA clone IMAGE:503545 5'
10020	22515	35509	1.61	0.0E+00	AA131248.1	EST_HUMAN	231101.11 Soares_pregnant_uterus_NHPU Homo sapiens cDNA clone IMAGE:503545 5'
10061	22556	35551	1.58	0.0E+00	AF179308.1	NT	Homo sapiens KIF4 (KIF4) mRNA, complete cds
10102	22597	35590	0.75	0.0E+00	BE880658.1	EST_HUMAN	601491565F1 NIH_MGC 89 Homo sapiens cDNA clone IMAGE:3833857 5'
10113	22608	35598	11.65	0.0E+00	BE730772.1	EST_HUMAN	601570712F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3845403 5'
10113	22608	35598	11.65	0.0E+00	BE730772.1	EST_HUMAN	601570712F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3845403 5'
10118	22613	35603	1.05	0.0E+00	AL127403.1	EST_HUMAN	AL127403 NT2RP2 Homo sapiens cDNA clone NT2RP2001212 5'
10127	22622	35612	0.99	0.0E+00	BE858511.1	EST_HUMAN	601845134F1 NIH_MGC 58 Homo sapiens cDNA clone IMAGE:3930177 5'
10127	22622	35613	0.99	0.0E+00	BE858511.1	EST_HUMAN	601845134F1 NIH_MGC 58 Homo sapiens cDNA clone IMAGE:3930177 5'
10142	22637	35628	0.79	0.0E+00	BE897487.1	EST_HUMAN	601432317F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:3917453 5'
10163	22648	35642	0.78	0.0E+00	AA311624.1	EST_HUMAN	EST182353 Jurkat T-cells VI Homo sapiens cDNA 5' end
10164	22649	35643	0.57	0.0E+00	4758827	NT	Homo sapiens neuradin III (NRXN3) mRNA
10167	22682	35657	0.81	0.0E+00	BE891113.1	EST_HUMAN	601432228F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:3917588 5'
10170	22685	35680	1.29	0.0E+00	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
10179	22674	35666	1.47	0.0E+00	AB028290.1	NT	Homo sapiens mRNA for actin binding protein ABP820, complete cds
10180	22675	35667	0.53	0.0E+00	BE304522.1	EST_HUMAN	601105459F1 NIH_MGC 15 Homo sapiens cDNA clone IMAGE:2887918 5'
10180	22676	35668	0.53	0.0E+00	BE304522.1	EST_HUMAN	601105459F1 NIH_MGC 15 Homo sapiens cDNA clone IMAGE:2887918 5'
10187	22682	35673	6.03	0.0E+00	AB006590.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds
10187	22682	35674	6.03	0.0E+00	AB006590.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds
10184	22689	35682	0.57	0.0E+00	AA194770.1	EST_HUMAN	zp08h11.11 Stratiogene muscle 837208 Homo sapiens cDNA clone IMAGE:628365 5' similar to TR:G407097
10196	22691	35694	1.18	0.0E+00	AA704457.1	EST_HUMAN	G407097 168KD PROTEIN ;
10196	22693	35695	1.31	0.0E+00	M22921.1	NT	z18006.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:450707 3' similar to gb:M14123_cds1 RETROVIRUS-RELATED GAG POLYPROTEIN (HUMAN);
10200	22685	35688	5.5	0.0E+00	BF340331.1	EST_HUMAN	Human beta 1,4-galactosyl-transferase mRNA, complete cds
10200	22685	35689	5.5	0.0E+00	BF340331.1	EST_HUMAN	602037045F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4184839 5'
10207	22722	35713	0.93	0.0E+00	BE897149.1	EST_HUMAN	602037045F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4184839 5'
10227	22722	35714	0.93	0.0E+00	BE897149.1	EST_HUMAN	601439713F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:3924578 5'
10256	22751	35739	0.53	0.0E+00	AV716271.1	EST_HUMAN	601439713F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:3924578 5'
10256	22751	35739	0.53	0.0E+00	AV716271.1	EST_HUMAN	AV716271 DC8 Homo sapiens cDNA clone DC8BDC09 5'
10256	22751	35740	0.53	0.0E+00	AV716271.1	EST_HUMAN	AV716271 DC8 Homo sapiens cDNA clone DC8BDC09 5'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10285	22780	35770	0.77	0.0E+00	A1631818.1	EST_HUMAN	wa38e03.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2300188 3' similar to TR:Q81204
10285	22780	35771	0.77	0.0E+00	A1631818.1	EST_HUMAN	Q81204 NOTCH2-LIKE ;
10288	22782	35782	1.32	0.0E+00	T03078.1	EST_HUMAN	wa38e03.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2300188 3' similar to TR:Q81204
10321	22815	35811	0.83	0.0E+00	AU122428.1	EST_HUMAN	Q81204 NOTCH2-LIKE ;
10348	22842	35838	2.69	0.0E+00	BF436218.1	EST_HUMAN	FB23A4 Fetal brain, Strategene Homo sapiens cDNA clone FB23A4 3'end
10349	22843		1.61	0.0E+00	AV654765.1	EST_HUMAN	AU122428 MAMMA1 Homo sapiens cDNA clone MAMMA1002368 5'
							na045a12.x1 Soares_NSF_FB_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3265271 3'
							AV654765 GLC Homo sapiens cDNA clone GLCDZC07 3'
							xa174b01.x1 NCI_CGAP_Kid8 Homo sapiens cDNA clone IMAGE:2807401 3' similar to gb:IM89068 MOESIN (HUMAN);
10367	22861	35854	3.53	0.0E+00	AW517860.1	EST_HUMAN	(HUMAN);
10371	22865	35858	21.07	0.0E+00	BE549213.1	EST_HUMAN	601078784F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3464703 5'
10388	22880	35874	0.56	0.0E+00	11436005	NT	Homo sapiens hypothetical protein DKFZp781P1010 (DKFZp781P1010), mRNA
10410	22904	35901	1.22	0.0E+00	X89893.1	NT	H. sapiens mRNA for NK receptor (183 Act1)
10411	22905	35902	3	0.0E+00	BE781742.1	EST_HUMAN	601467419F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870700 5'
10430	22924	35928	2.88	0.0E+00	BE082720.1	EST_HUMAN	RC2-BT0842-150200-012-403 BT0842 Homo sapiens cDNA
10430	22924	35930	2.88	0.0E+00	BE082720.1	EST_HUMAN	RC2-BT0842-150200-012-403 BT0842 Homo sapiens cDNA
10437	22931	35938	0.6	0.0E+00	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
10443	22937	35947	0.98	0.0E+00	AJ658890.1	EST_HUMAN	tt54e07.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2244612 3'
10450	22944	35954	5.46	0.0E+00	BE743215.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3635188 5'
10450	22944	35955	5.46	0.0E+00	BE743215.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3635188 5'
10453	22947	35956	1.83	0.0E+00	BE617855.1	EST_HUMAN	601441723T1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3845956 3'
10453	22947	35957	1.83	0.0E+00	BE617855.1	EST_HUMAN	601441723T1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3845956 3'
10458	22952	35960	0.49	0.0E+00	D28954.1	NT	Human mRNA for KIAA0056 gene, partial cds
10458	22952	35961	0.49	0.0E+00	D28954.1	NT	Human mRNA for KIAA0056 gene, partial cds
10474	22968	35977	0.68	0.0E+00	H38805.1	EST_HUMAN	yp01a10.r1 Soares breast 3NbHBst Homo sapiens cDNA clone IMAGE:186138 5'
10487	22981	35988	0.46	0.0E+00	AW748117.1	EST_HUMAN	QV0-BT0107-230788-007-c06 BT0107 Homo sapiens cDNA
10496	22990	35998	1.14	0.0E+00	D87876.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
10508	23002	36010	0.8	0.0E+00	D28954.1	NT	Human mRNA for KIAA0056 gene, partial cds
10515	23053	36064	2.76	0.0E+00	AV711075.1	EST_HUMAN	AV711075 Cu Homo sapiens cDNA clone CUAAGG05 5'
10515	23053	36065	2.76	0.0E+00	AV711075.1	EST_HUMAN	AV711075 Cu Homo sapiens cDNA clone CUAAGG05 5'
10517	23055		6.05	0.0E+00	AW813783.1	EST_HUMAN	RC3-ST0197-120200-015-403 ST0197 Homo sapiens cDNA
10525	23062	36073	7.48	0.0E+00	AW983563.1	EST_HUMAN	EST375636 MAGE resequences, MAGH Homo sapiens cDNA
10538	23075	36088	1.91	0.0E+00	11431124	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
10538	23075	36089	1.91	0.0E+00	11431124	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA

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Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10540	23077	36081	1.82	0.0E+00	AW057821.1	EST_HUMAN	wy6108.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2563065 3' similar to TR:Q60588 Q60588 VDX;
10549	23085	36089	2.28	0.0E+00	BE243270.1	EST_HUMAN	TCAAP3D0817 Pediatric acute myelogenous leukemia cell (FAB M1) BayAr-HGSC project=TCAA Homo sapiens cDNA clone TCAAP0917
10550	23086	36100	2.73	0.0E+00	AB52239.1	EST_HUMAN	wb28a12.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2306874 3' similar to contains element MSR1 MSR1 repetitive element;
10550	23088	36101	2.73	0.0E+00	AB52239.1	EST_HUMAN	wb28a12.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2306874 3' similar to contains element MSR1 MSR1 repetitive element;
10561	23087	36110	4.31	0.0E+00	11545911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
10561	23087	36111	4.31	0.0E+00	11545911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
10578	23111	36124	1.98	0.0E+00	AW404795.1	EST_HUMAN	UH-F-BLO-acm-d-04-0-U1.1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3056383 5'
10580	23115	36128	5.82	0.0E+00	11424829	NT	Homo sapiens hypothetical protein FLJ20079 (FLJ20079), mRNA
10581	23116	36130	10.05	0.0E+00	4504538	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E), mRNA
10581	23116	36131	10.05	0.0E+00	4504538	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E), mRNA
10582	23117	36132	2.9	0.0E+00	AB91827.1	EST_HUMAN	wb28a12.x1 Soares Dieckgraebe colon_NHCD Homo sapiens cDNA clone IMAGE:2521715 3'
10583	23120	36138	2.57	0.0E+00	BE882109.1	EST_HUMAN	601505204F2 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3906865 5'
10589	23124	36138	15.86	0.0E+00	BE891630.1	EST_HUMAN	601434522F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919636 5'
10591	23128	36139	2.44	0.0E+00	8923839	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
10591	23128	36140	2.44	0.0E+00	8923839	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
10606	23140	36152	6.94	0.0E+00	BE903304.1	EST_HUMAN	601874332F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3957343 5'
10608	18572	31304	2.31	0.0E+00	AA185905.1	EST_HUMAN	zp95b11.1 Stratagene muscle 837208 Homo sapiens cDNA clone IMAGE:627933 5' similar to gb:X03740 MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
10630	23162	36174	1.99	0.0E+00	AA809080.1	EST_HUMAN	hw17c08.s1 NCI_CGAP_GC80 Homo sapiens cDNA clone IMAGE:1240718 3' similar to gb:X57809 IG LAMBDA CHAIN C REGIONS (HUMAN);
10632	23164	36176	5.44	0.0E+00	BE783498.1	EST_HUMAN	601588828F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3843015 5'
10640	23172	36183	19.41	0.0E+00	AV727362.1	EST_HUMAN	AV727362 HTC Homo sapiens cDNA clone HTCAQH06 5'
10640	23172	36184	19.41	0.0E+00	AV727362.1	EST_HUMAN	AV727362 HTC Homo sapiens cDNA clone HTCAQH06 5'
10654	23186	36202	18.4	0.0E+00	AW516055.1	EST_HUMAN	xy04g10.x1 NCI_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2852228 3' similar to gb:M60854 40S RIBOSOMAL PROTEIN S16 (HUMAN);
10660	23192	36207	3.16	0.0E+00	AU135741.1	EST_HUMAN	AU135741 PLACE1 Homo sapiens cDNA clone PLACE1002764 5'
10665	23197	36210	2.88	0.0E+00	AW583333.1	EST_HUMAN	hg13402.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSR1 repetitive element;
10665	23197	36211	2.88	0.0E+00	AW583333.1	EST_HUMAN	hg13402.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSR1 repetitive element;

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10685	23197	36212	2.88	0.0E+00	AW593333.1	EST_HUMAN	hg13402.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2846476 3' similar to contains element MSR1 repetitive element;
10687	23199	36213	1.99	0.0E+00	Z34897.1	NT	H. sapiens mRNA for H1 histamine receptor
10688	23200	36214	3.18	0.0E+00	F13069.1	EST_HUMAN	HSC3(C031 normalized infant brain cDNA Homo sapiens cDNA clone c-3ic03
10676	23208	36220	3.91	0.0E+00	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
10679	23211	36222	33.48	0.0E+00	11425570	NT	Homo sapiens ryenodine receptor 1 (skelatal) (RYR1), mRNA
10685	23225	36239	3.59	0.0E+00	AW338094.1	EST_HUMAN	xb6601.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2832885 3' similar to gb:X17115 IG MU CHAIN C REGION (HUMAN);
10686	23226	36240	5.84	0.0E+00	AW451230.1	EST_HUMAN	UIH-BI3-eth-a-01-0-UI.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736649 3'
10688	23228	36241	5.84	0.0E+00	AW451230.1	EST_HUMAN	UIH-BI3-eth-a-01-0-UI.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736649 3'
10689	12891		16.23	0.0E+00	4506832	NT	Homo sapiens ribosomal protein L31 (RPL31) mRNA
10701	23230	36243	2.17	0.0E+00	AB014507.1	NT	Homo sapiens mRNA for KIAA0607 protein, partial cds
10714	23242	36258	2.28	0.0E+00	BE268449.1	EST_HUMAN	601119248F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028219 5'
10730	23256	36272	1.99	0.0E+00	AB011117.1	NT	Homo sapiens mRNA for KIAA0545 protein, partial cds
10746	23270	36286	2.18	0.0E+00	BE792155.1	EST_HUMAN	601582048F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3936539 5'
10747	23271		78.35	0.0E+00	BF684081.1	EST_HUMAN	602141405F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4302432 5'
10749	23273	36288	4.66	0.0E+00	AU118396.1	EST_HUMAN	AU118396 HEMBA1 Homo sapiens cDNA clone HEMBA1003486 5'
10750	23274		8.15	0.0E+00	AW236289.1	EST_HUMAN	xm72601.x1 NCI_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2688977 3' similar to gb:X02152_cds1 L-LACTATE DEHYDROGENASE M CHAIN (HUMAN);
10755	23279	36282	7.25	0.0E+00	A1149809.1	EST_HUMAN	qf43c03.x1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:1752772 3'
10755	23279	36283	7.25	0.0E+00	A1149809.1	EST_HUMAN	qf43c03.x1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:1752772 3'
10756	23280	36284	3.47	0.0E+00	AW391837.1	EST_HUMAN	QV4-ST0234-121189-032-606 ST0234 Homo sapiens cDNA
10768	23282		1.64	0.0E+00	AU116908.1	EST_HUMAN	AU116908 HEMBA1 Homo sapiens cDNA clone HEMBA1000255 5'
10771	23295	36301	20.95	0.0E+00	11424728	NT	Homo sapiens insulin receptor (INSR), mRNA
10777	23301	36307	1.89	0.0E+00	AW804516.1	EST_HUMAN	QV0-UM00063-170400-191-006 UM0063 Homo sapiens cDNA
10777	23301	36308	1.89	0.0E+00	AW804516.1	EST_HUMAN	QV0-UM00063-170400-191-006 UM0063 Homo sapiens cDNA
10778	23302	36309	2.04	0.0E+00	BF340308.1	EST_HUMAN	602037014F1 NCI_CGAP_Brm84 Homo sapiens cDNA clone IMAGE:4184979 6'
10779	23303	36310	39.26	0.0E+00	BE261209.1	EST_HUMAN	601146357F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3163310 5'
10780	23313	36321	3.78	0.0E+00	U50328.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 15-17
10784	23317	36326	3.48	0.0E+00	BE773096.1	EST_HUMAN	RC1-F10134-170700-012-407 FT0134 Homo sapiens cDNA
10794	23317	36327	3.48	0.0E+00	BE773096.1	EST_HUMAN	RC1-F10134-170700-012-407 FT0134 Homo sapiens cDNA
10816	23337	36350	55.63	0.0E+00	AA740782.1	EST_HUMAN	db32a07.s1 NCI_CGAP_Ku65 Homo sapiens cDNA clone IMAGE:1325412 3' similar to contains element MSR1 repetitive element;
10822	23343	36356	3.04	0.0E+00	AF252303.1	NT	Homo sapiens signaling lymphocytic activation molecule (SLAM) gene, exon 2

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10835	23358	36371	1.92	0.0E+00	BE268478.1	EST_HUMAN	601192748F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3536887 5'
10835	23358	36372	1.92	0.0E+00	BE268478.1	EST_HUMAN	601192748F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3536887 5'
10838	23359	36374	6.99	0.0E+00	CO5080.1	EST_HUMAN	CO5080 Human heart cDNA (YNAKamura) Homo sapiens cDNA clone 3NH4817
10845	23368	36382	2.18	0.0E+00	AA748376.1	EST_HUMAN	ca56801.1 NCJ CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1309009 5'
10845	23368	36383	2.18	0.0E+00	AA748376.1	EST_HUMAN	ca56801.1 NCJ CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1309009 5'
10856	23377	36395	8.08	0.0E+00	AL157608.1	EST_HUMAN	DKFZp761J2116_1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761J2116 5'
10868	23389	36404	12.62	0.0E+00	AU116988.1	EST_HUMAN	AU116988 HEMBA1 Homo sapiens cDNA clone HEMBA1000424 5'
10881	23402	36419	2.07	0.0E+00	AV693656.1	EST_HUMAN	AV693656 GK C Homo sapiens cDNA clone GKCCNC03 5'
10913	23432	36453	3.17	0.0E+00	BE182360.1	EST_HUMAN	PMO-HT0645-060500-002-E05 HT0645 Homo sapiens cDNA
10913	23432	36454	3.17	0.0E+00	BE182360.1	EST_HUMAN	PMO-HT0645-060500-002-E05 HT0645 Homo sapiens cDNA
10914	23433		1.8	0.0E+00	AV701152.1	EST_HUMAN	AV701152 ADA Homo sapiens cDNA clone ADAAAD08 5'
10928	23446	36467	3.19	0.0E+00	BE898423.1	EST_HUMAN	601439082F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924142 5'
10935	23452	36474	1.69	0.0E+00	AW500307.1	EST_HUMAN	UIHF-BNO-akg-4-02-0-U1.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077019 5'
10935	23452	36475	1.69	0.0E+00	AW500307.1	EST_HUMAN	UIHF-BNO-akg-4-02-0-U1.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077019 5'
							bb78e04.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048488 5' similar to gb:Y00345_cds1 POLYADENYLATE-BINDING PROTEIN (HUMAN); gb:X65553 M.musculus mRNA for poly(A) binding protein (MOUSE);
10938	23455	36478	6.2	0.0E+00	BE018293.1	EST_HUMAN	601440446F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3925403 5'
10972	23487	36516	5.22	0.0E+00	BE897953.1	EST_HUMAN	sc89g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'
10973	23488	36517	1.99	0.0E+00	AI459545.1	EST_HUMAN	sc89g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'
10973	23488	36518	1.99	0.0E+00	AI459545.1	EST_HUMAN	sc89g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'
10986	23500	36530	1.82	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120_1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L0120 5'
11018	23532	36568	3.57	0.0E+00	4758827	NT	Homo sapiens neuradin III (NR2N3) mRNA
11019	23533	36569	8.71	0.0E+00	BF206581.1	EST_HUMAN	601870902F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4101433 5'
11023	23537	36573	20.4	0.0E+00	AW207734.1	EST_HUMAN	UIH-B12-age-h-01-0-U1.51 NCJ CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2724312 3'
11028	23542	36577	6.39	0.0E+00	AB018260.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
11028	23542	36578	6.39	0.0E+00	AB018260.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
							ba04407.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B 55KDA-ASSOCIATED PROTEIN.;
11029	23543	36579	3.28	0.0E+00	BE206846.1	EST_HUMAN	ba04407.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B 55KDA-ASSOCIATED PROTEIN.;
11029	23543	36580	3.28	0.0E+00	BE206846.1	EST_HUMAN	55KDA-ASSOCIATED PROTEIN.;
11053	23568	36602	2.05	0.0E+00	BF093687.1	EST_HUMAN	QV6-UM0091-120900-385-612 UM0091 Homo sapiens cDNA
11054	20011	32877	2.13	0.0E+00	L32832.1	NT	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds
11057	23569	36604	3.38	0.0E+00	BE148076.1	EST_HUMAN	RC3-HT0230-040500-110-H04 HT0230 Homo sapiens cDNA
11057	23569	36605	3.38	0.0E+00	BE148076.1	EST_HUMAN	RC3-HT0230-040500-110-H04 HT0230 Homo sapiens cDNA

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11082	23604	36844	5.37	0.0E+00	BF507878.1	EST_HUMAN	U1H-B14-ack-b-10-Q-U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085028 3'
11082	23604	36845	5.37	0.0E+00	BF507878.1	EST_HUMAN	U1H-B14-ack-b-10-Q-U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085028 3'
11101	23611	36851	3.82	0.0E+00	AU135170.1	EST_HUMAN	AU135170 PLACE1 Homo sapiens cDNA clone PLACE1001381 5'
11105	23615	36855	1.61	0.0E+00	BF576138.1	EST_HUMAN	602132459F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4271630 5'
11105	23615	36856	1.61	0.0E+00	BF576138.1	EST_HUMAN	602132459F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4271630 5'
11108	23616	36857	8.62	0.0E+00	BE876401.1	EST_HUMAN	601486828F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3889207 5'
11108	23616	36858	8.62	0.0E+00	BE876401.1	EST_HUMAN	601486828F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3889207 5'
11113	23623	36864	1.85	0.0E+00	D87682.1	NT	Human mRNA for KIAA0241 gene, partial cds
11119	23628		5.3	0.0E+00	BF240538.1	EST_HUMAN	601875630F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4089710 5'
11132	23640	36880	3.05	0.0E+00	AB037737.1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
11132	23640	36881	3.05	0.0E+00	AB037737.1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
11137	23645	36885	3.57	0.0E+00	11430888	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
11137	23645	36886	3.57	0.0E+00	11430888	NT	Homo sapiens retinoblastoma-like 2 (p130) (RBL2), mRNA
11154	23661	36708	9.12	0.0E+00	4503544	NT	Homo sapiens retinoblastoma-like 2 (p130) (RBL2), mRNA
11182	23669	36714	1.68	0.0E+00	BF576267.1	EST_HUMAN	Homo sapiens eukaryotic translation initiation factor 5A (EIF5A) mRNA
11185	23672	36718	6.44	0.0E+00	AW328173.1	EST_HUMAN	602134132F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4289502 5'
11188	23675		48.81	0.0E+00	M55083.1	NT	Human gamma actin-like pseudogene, complete cds
11173	23680	36725	5.47	0.0E+00	BF306898.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
11173	23680	36726	5.47	0.0E+00	BF306898.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
11180	23686	36733	45.22	0.0E+00	BF362482.1	EST_HUMAN	QV2-NN0054-230800-333-404 NN0054 Homo sapiens cDNA
11201	23708	36757	1.99	0.0E+00	U36284.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 16
11201	23708	36758	1.99	0.0E+00	U36284.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 16
11205	23710		6.26	0.0E+00	BE897051.1	EST_HUMAN	601439805F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924577 5'
11206	23711		1.01	0.0E+00	4503780	NT	Homo sapiens tyrosine-related kinase (PRK) mRNA
11217	23720	36774	2.82	0.0E+00	8923898	NT	Homo sapiens gadin-like protein (GLP), mRNA
11219	23722		2.96	0.0E+00	BF207892.1	EST_HUMAN	601881947F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:4081715 5'
11220	23723		7.59	0.0E+00	BE237744.1	EST_HUMAN	601116705F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3357384 5'
11233	23764	36820	5.51	0.0E+00	BE206848.1	EST_HUMAN	bs04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B-55KDA-ASSOCIATED PROTEIN. ;
11233	23764	36821	5.51	0.0E+00	BE206848.1	EST_HUMAN	55KDA-ASSOCIATED PROTEIN. ;
11235	23766	36823	4.66	0.0E+00	AW753028.1	EST_HUMAN	QV0-CT0225-101289-071-406 CT0225 Homo sapiens cDNA
11240	23771		3.42	0.0E+00	AA558707.1	EST_HUMAN	m42c08.s1 NCI_CGAP_Pr4 Homo sapiens cDNA clone IMAGE:1043342 similar to gb:1865178 ALPHA-ACTININ 1, CYTOSKELETAL ISOFORM (HUMAN);

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11241	18112	30521	6.08	0.0E+00	A934954.1	EST_HUMAN	wp08g08.x1 NCI_CGAP_K1212 Homo sapiens cDNA clone IMAGE:2464094 3'
11242	23772	36829	9.55	0.0E+00	AW327895.1	EST_HUMAN	dn02b08.x1 NIH_MGC_3 Homo sapiens cDNA clone IMAGE:2846919 5'
11260	24801	36847	1.56	0.0E+00	AW292778.1	EST_HUMAN	U1H-BWO-ef-q-07-Q-U1.s1 NCI_CGAP_Sub06 Homo sapiens cDNA clone IMAGE:2729509 3'
11266	23004	36012	2.1	0.0E+00	4758827	NT	Homo sapiens neurabin III (NRXN3) mRNA
11274	28727	36781	1.59	0.0E+00	BE86509.2	EST_HUMAN	601850088R1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3805916 3'
11274	23727	36782	1.59	0.0E+00	BE86509.2	EST_HUMAN	601850088R1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3805916 3'
11275	23728	36783	4.55	0.0E+00	BE185656.1	EST_HUMAN	IL5-HT0731-020500-077-05 HT0731 Homo sapiens cDNA
11288	23740	36786	5.82	0.0E+00	ALD40540.1	EST_HUMAN	DKFZp434G178_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434G178 5'
11288	23740	36787	5.82	0.0E+00	ALD40540.1	EST_HUMAN	DKFZp434G178_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434G178 5'
11298	23750	36807	18.85	0.0E+00	A923116.1	EST_HUMAN	wn83g03.x1 NCI_CGAP_U1 Homo sapiens cDNA clone IMAGE:2452468 3' similar to gb:SS7431 LAMININ RECEPTOR (HUMAN);
11301	23784	36851	7	0.0E+00	AA760913.1	EST_HUMAN	nz11c07.s1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1287468 3' similar to TR:Q13686
11301	23794	36852	7	0.0E+00	AA760913.1	EST_HUMAN	Q13686 ALKB HOMOLOG PROTEIN.;
11306	23789	36858	2.02	0.0E+00	BE910546.1	EST_HUMAN	Q13686 ALKB HOMOLOG PROTEIN.;
11314	23012	36021	7.16	0.0E+00	BE876347.1	EST_HUMAN	701501080F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902928 5'
11323	23021	36030	1.69	0.0E+00	AV757420.1	EST_HUMAN	701501080F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902928 5'
11352	23808	36865	3.55	0.0E+00	L39891.1	NT	CHECKPOINT SUPPRESSOR 1.;
11352	23808	36866	3.55	0.0E+00	L39891.1	NT	AV757420 BM Homo sapiens cDNA clone BMFAGH03 5'
11368	23818	36879	4.02	0.0E+00	AU138211.1	EST_HUMAN	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
11381	23833	36896	9.87	0.0E+00	BE622317.1	EST_HUMAN	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
11386	23838	36900	11.61	0.0E+00	A1207425.1	EST_HUMAN	AU138211 PLACE1 Homo sapiens cDNA clone PLACE1008077 5'
11388	23838	36901	11.61	0.0E+00	A1207425.1	EST_HUMAN	601441086F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916270 5'
11415	23868	36927	36.88	0.0E+00	BE748899.1	EST_HUMAN	HA2767 Human fetal liver cDNA library Homo sapiens cDNA
11415	23868	36928	36.88	0.0E+00	BE748899.1	EST_HUMAN	HA2767 Human fetal liver cDNA library Homo sapiens cDNA
11425	23876	36940	2.19	0.0E+00	AU141882.1	EST_HUMAN	601572186T1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3839012 3'
11425	23876	36941	2.19	0.0E+00	AU141882.1	EST_HUMAN	601572186T1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3839012 3'
11428	23879	36944	2.52	0.0E+00	AW000022.1	EST_HUMAN	AU141882 THYRO1 Homo sapiens cDNA clone THYRO1001398 5'
11431	24802	36947	3.76	0.0E+00	BF0002333.1	EST_HUMAN	AU141882 THYRO1 Homo sapiens cDNA clone THYRO1001398 5'
11450	23900	36967	3.81	0.0E+00	AW387776.1	EST_HUMAN	w281n01.x1 NCI_CGAP_Bn25 Homo sapiens cDNA clone IMAGE:2568225 3' similar to WP-F53H10.2
							CE11040 ZINC FINGER, C2H2 TYPE.;
							7n22b10.x1 NCI_CGAP_C016 Homo sapiens cDNA clone IMAGE:3316899 3' similar to TR:Q13458 Q13458
							TRIO.;
							MR4-ST0118-261088-012-b03 ST0118 Homo sapiens cDNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11450	23900	36988	3.61	0.0E+00	AW387778.1	EST_HUMAN	MR4-ST0118-261088-012-603 ST0118 Homo sapiens cDNA
11459	23909		2.48	0.0E+00	AW663777.1	EST_HUMAN	MR3-SN0010-310300-107-403 SN0010 Homo sapiens cDNA
11471	23921	36990	3.38	0.0E+00	11435244	NT	Homo sapiens KIAA0247 gene product (KIAA0247), mRNA
11471	23921	36991	3.38	0.0E+00	11435244	NT	Homo sapiens KIAA0247 gene product (KIAA0247), mRNA
11478	23928	36997	7.44	0.0E+00	U38253.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 5
11479	23929	36998	12.8	0.0E+00	BE378254.1	EST_HUMAN	601237691F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609623 5'
11479	23929	37000	12.8	0.0E+00	BE378254.1	EST_HUMAN	601237691F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609623 5'
11482	23941	37012	2.5	0.0E+00	BE794758.1	EST_HUMAN	601590588F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944708 5'
11493	23942	37013	115.56	0.0E+00	BE879633.1	EST_HUMAN	601491821F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3894220 5'
11507	23956	37028	18.86	0.0E+00	BE409983.1	EST_HUMAN	601289403F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3629544 5'
11508	23957	37027	1.94	0.0E+00	BE148650.1	EST_HUMAN	MR0-HT0241-160500-011-402 HT0241 Homo sapiens cDNA
11509	23958	37028	3.08	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11509	23958	37029	3.08	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11510	18292	30771	1.77	0.0E+00	D28535.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
11510	18292	30772	1.77	0.0E+00	D28535.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
11518	23968	37038	2.03	0.0E+00	AU132840.1	EST_HUMAN	AU132840 NT2RP4 Homo sapiens cDNA clone NT2RP4000829 5'
11521	23969	37040	4.44	0.0E+00	BE903372.1	EST_HUMAN	601678357F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3958935 5'
11533	23981	37051	1.94	0.0E+00	BF312552.1	EST_HUMAN	601897524F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4127069 5'
11533	23981	37052	1.84	0.0E+00	BF312552.1	EST_HUMAN	601897524F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4127069 5'
11535	23983	37054	3.01	0.0E+00	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
11535	23983	37055	3.01	0.0E+00	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
11544	23992		4.03	0.0E+00	BE906402.1	EST_HUMAN	601498563F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3900398 5'
11560	24007	37078	1.74	0.0E+00	9635487	NT	Human endogenous retrovirus, complete genome
11574	24803		23.39	0.0E+00	BF309120.1	EST_HUMAN	601890534F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131416 5'
11580	24026	37084	55.98	0.0E+00	BE297175.1	EST_HUMAN	601177407F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532888 5'
11589	24032	37102	7.09	0.0E+00	AL040783.1	EST_HUMAN	DKFZp340D0415_r1 434 (synonym: hbs3) Homo sapiens cDNA clone DKFZp340D0415 5'
11652	25091	30499	6.23	0.0E+00	BE312542.1	EST_HUMAN	601150023F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503020 5'
11668	24825		1.78	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
11668	24825		8.17	0.0E+00	AL163246.2	NT	qp17b12.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1738231 3'
11679	24097		3.67	0.0E+00	AB011396.1	NT	Homo sapiens gene for AF-6, complete cds
11689	24112		4.16	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11701	24114		1.35	0.0E+00	AB016195.1	NT	Homo sapiens ELK1 pseudogene (ELK2) and immunoglobulin heavy chain gamma pseudogene (IGHGP)
11709	24120		3.59	0.0E+00	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
11728	24134		6.98	0.0E+00	5802973	NT	Homo sapiens antioxidant protein 1 (AOP1), nuclear gene encoding mitochondrial protein, mRNA
11763	24897	30711	1.49	0.0E+00	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
11774	24908		4.78	0.0E+00	AL041931.1	EST_HUMAN	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
11803	25056		4.28	0.0E+00	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
11812	24184		11.29	0.0E+00	AL046544.1	EST_HUMAN	DKFZp434G218.1 434 (synonym: hbs3) Homo sapiens cDNA clone DKFZp434G218.5
11824	24841		2.62	0.0E+00	AI803497.1	EST_HUMAN	IL-BT030-271088-001 BT030 Homo sapiens cDNA
11862	25079		2.35	0.0E+00	N54484.1	EST_HUMAN	y40a08.s1 Scores fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:245222 3' similar to SW:POL_BAEVMI P10272 POL POLYPROTEIN;
11877	24227		4.72	0.0E+00	AF108656.1	NT	Homo sapiens adenylosuccinate lyase gene, complete cds
11880	13480	26007	5.46	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
11880	13480	26008	5.46	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
11889	24945		2.49	0.0E+00	10082587	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 (NFATC2), mRNA
11917	13204		3.24	0.0E+00	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
11955	24720	30870	4.32	0.0E+00	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12017	24871	30708	24.36	0.0E+00	AW590082.1	EST_HUMAN	hg31c08.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2847234 3' similar to contains Alu repetitive element/contains element MER22 repetitive element;
12028	24926		1.5	0.0E+00	BE090210.1	EST_HUMAN	RC8-BT0711-280300-011-D05 BT0711 Homo sapiens cDNA
12073	24938		2	0.0E+00	AF068757.1	NT	Homo sapiens somatostatin receptor subtype 3 (SSTR3) gene, 5' flanking region and partial cds
12112	24973		4.16	0.0E+00	8635487	NT	Human endogenous retrovirus, complete genome
12155	24931		1.83	0.0E+00	AI204914.1	EST_HUMAN	an05h04.x1 Stragene schizo brain S11 Homo sapiens cDNA clone IMAGE:1684759 3'
12189	24927		1.52	0.0E+00	BE439782.1	EST_HUMAN	HTM1-654F HTM1 Homo sapiens cDNA
12244	14314	26855	4.92	0.0E+00	H30132.1	EST_HUMAN	y65e08.r1 Scores breast 3N4B1st Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M84089
12244	14314	26856	4.92	0.0E+00	H30132.1	EST_HUMAN	GAMMA-GLUTAMYL TRANSPEPTIDASE 5 PRECURSOR (HUMAN);
12256	24466		33.19	0.0E+00	D50659.1	NT	y65e08.r1 Scores breast 3N4B1st Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M84089
12259	24468	30828	3.51	0.0E+00	11418189	NT	GAMMA-GLUTAMYL TRANSPEPTIDASE 6 PRECURSOR (HUMAN);
12259	24468	30828	3.51	0.0E+00	11418189	NT	Human gamma-cytoplasmic actin (ACTGP9) pseudogene
12259	24468	30828	3.51	0.0E+00	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
12259	24468	30828	3.51	0.0E+00	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12278	14717	27289	1.42	0.0E+00	4758488	NT	Homo sapiens GTP binding protein 1 (GTPBP1) mRNA
12318	24508		1.61	0.0E+00	AW684988.1	EST_HUMAN	h188a08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2879154 3'
12401	15863	28440	5.08	0.0E+00	4885312	NT	Homo sapiens G protein-coupled receptor 24 (GPR24), mRNA
12409	18031	30492	2.86	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12412	24586		2.55	0.0E+00	AB028900.1	NT	Homo sapiens CST gene for cerebroside sulfotransferase, exon 1, 2, 3, 4, 5
12453	24587	30917	1.87	0.0E+00	9558724	NT	Homo sapiens cleavage and polyadenylation specific factor 1, 160kD subunit (CPSF1), mRNA
12481	25102		2.92	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
12488	13277	25754	2.02	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12573	24870	30876	1.65	0.0E+00	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12578	24872		2.54	0.0E+00	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
12580	24876		4.31	0.0E+00	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
12600	24886		2.35	0.0E+00	AB028868.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)

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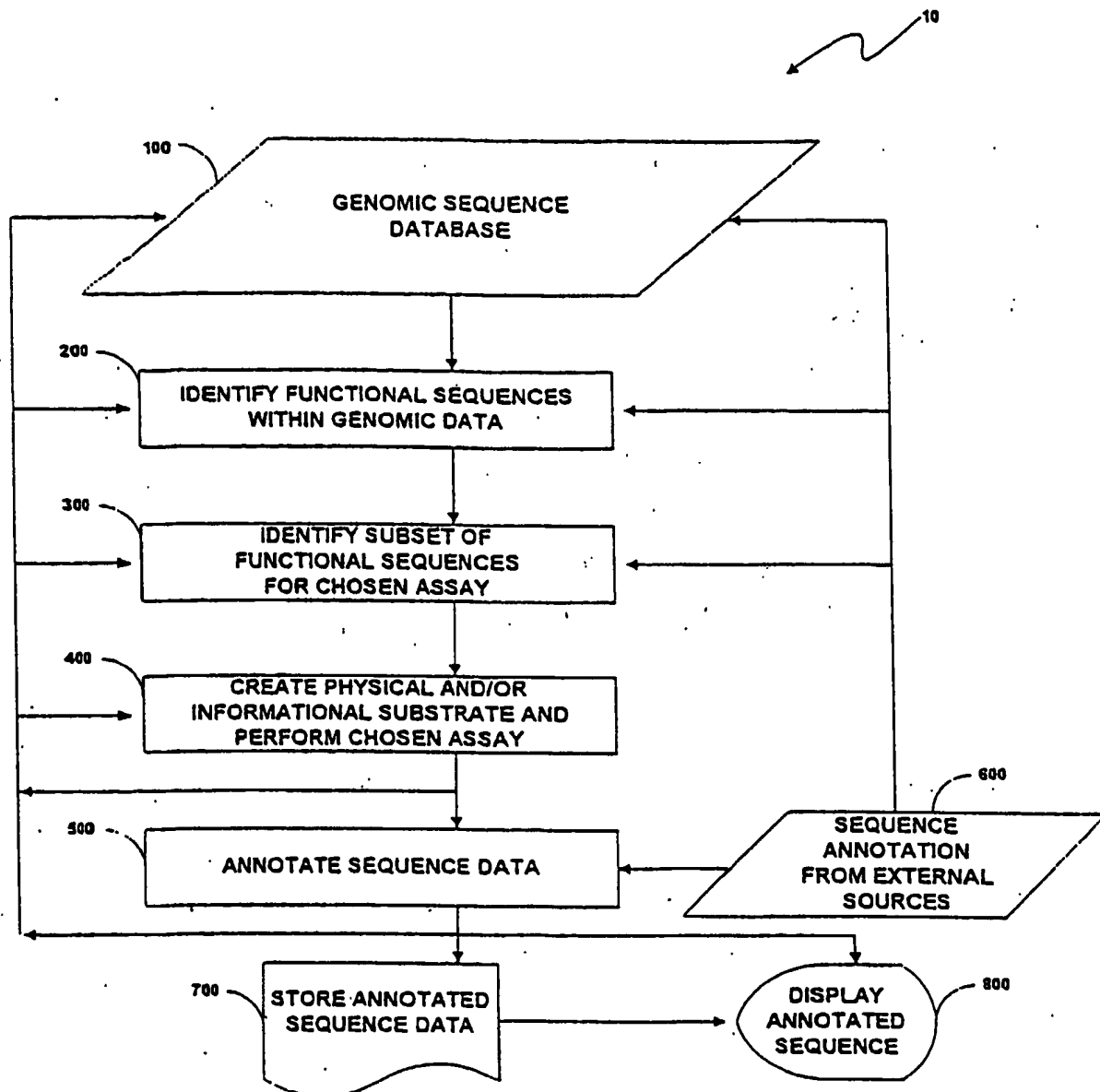


Fig. 1

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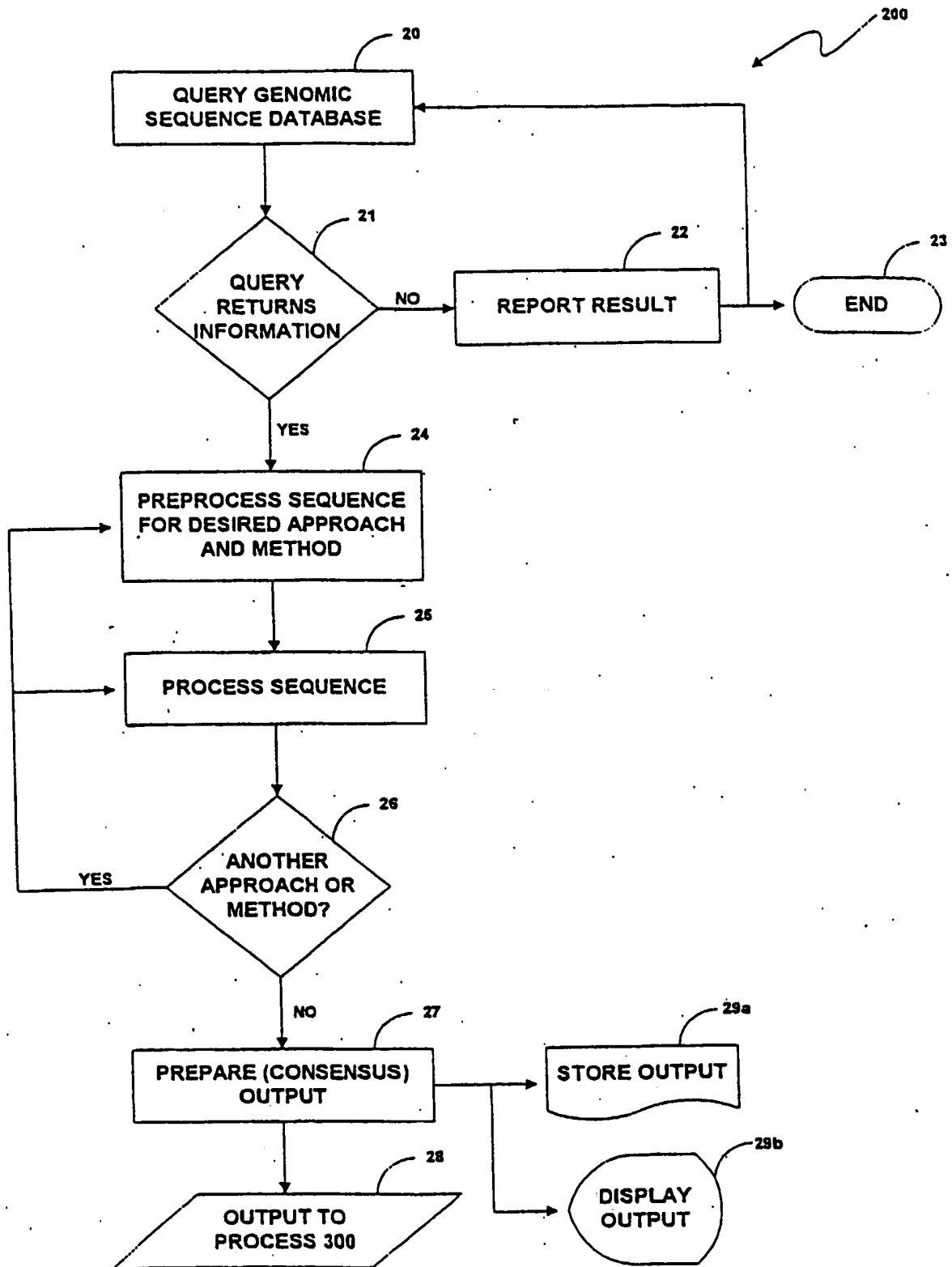


Fig. 2

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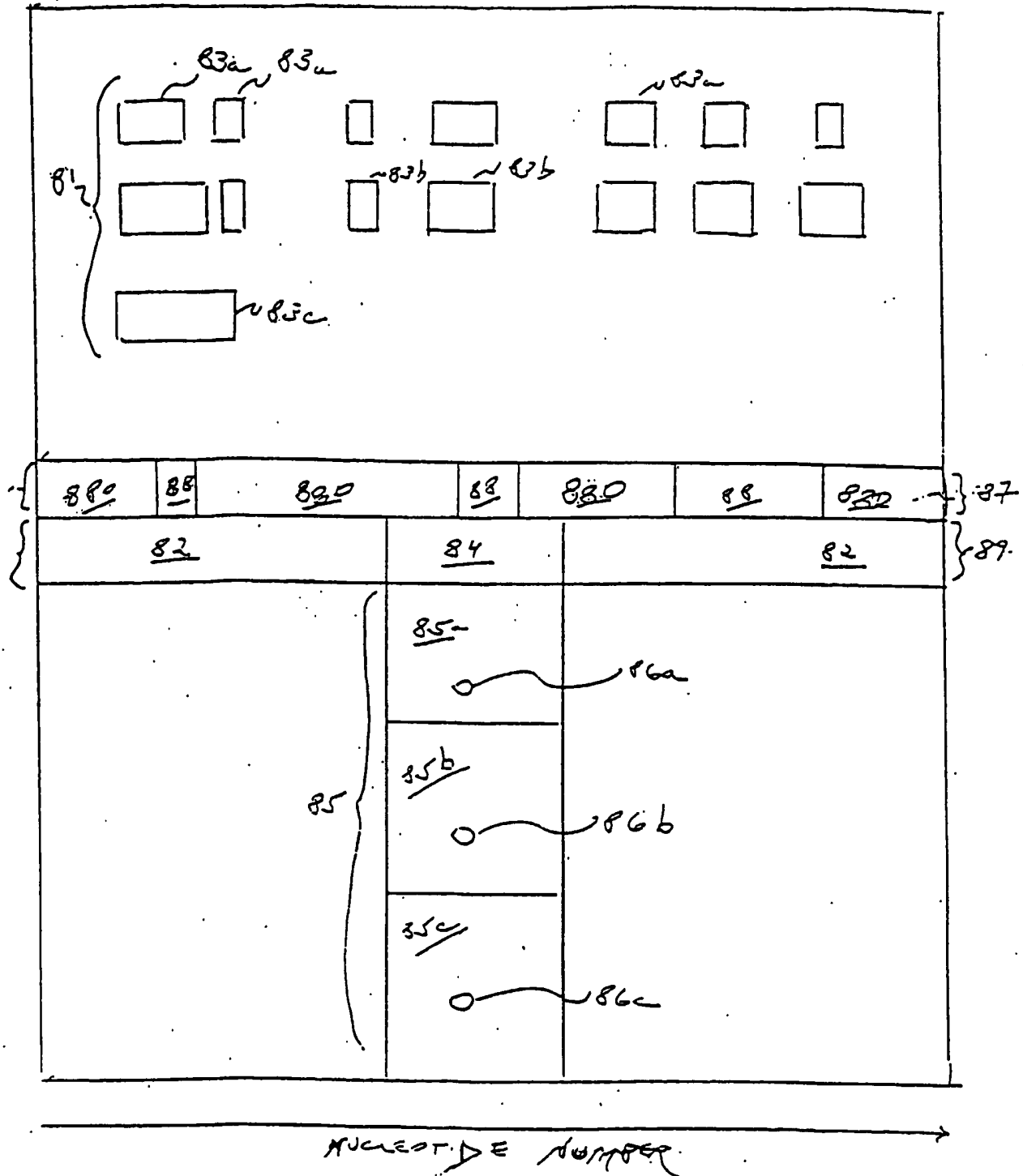


Fig. 3

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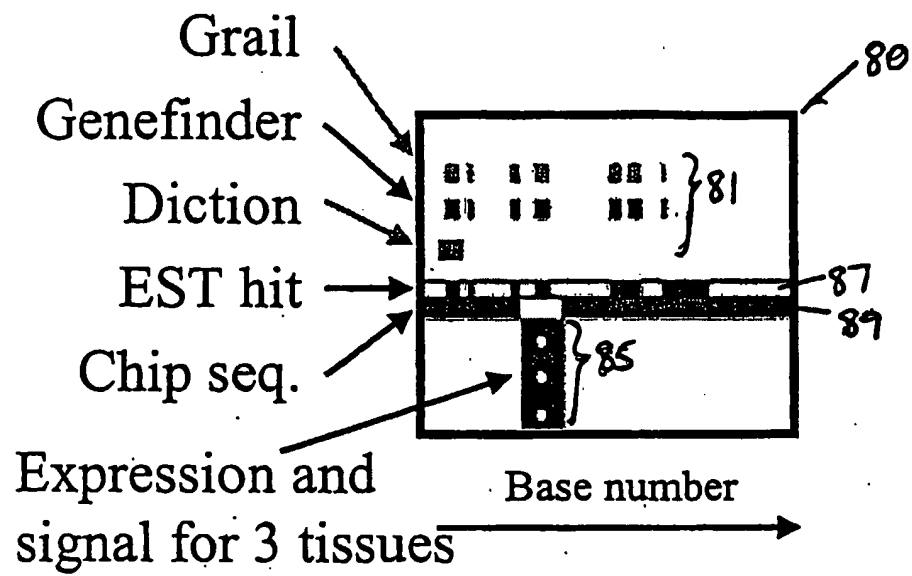


Fig. 4

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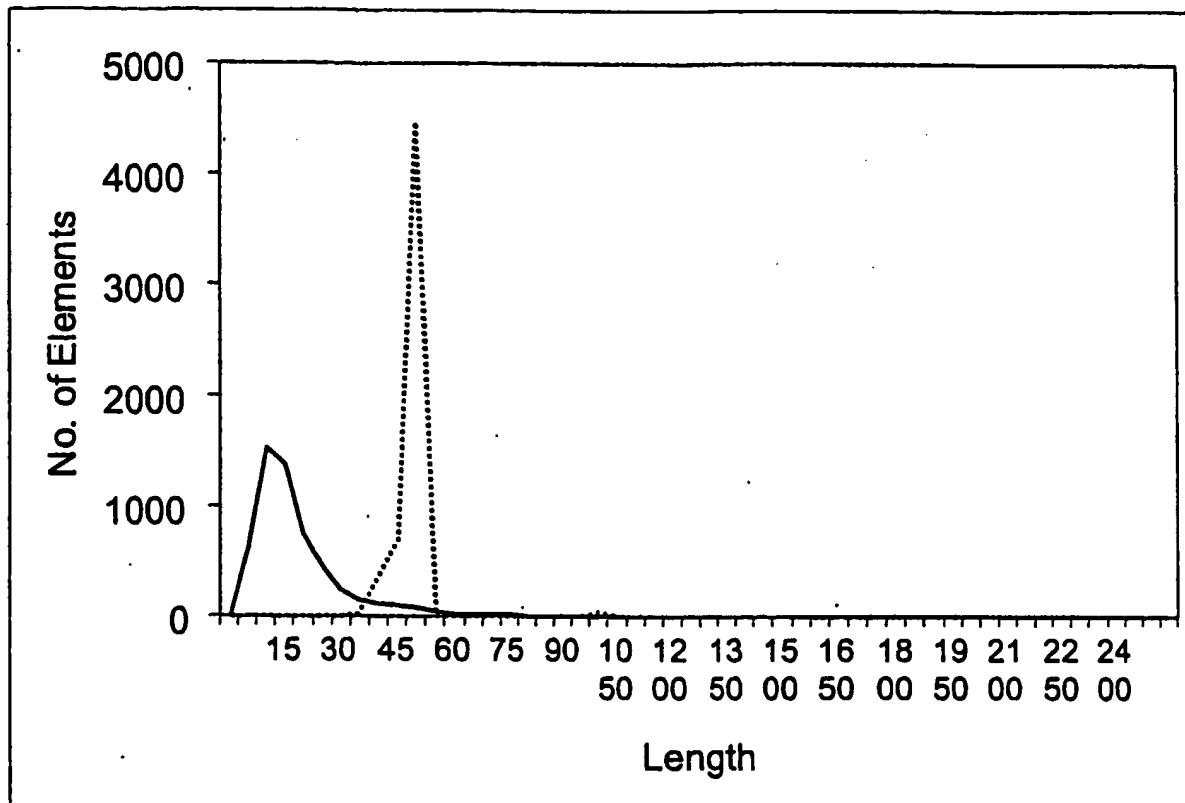


Fig. 5

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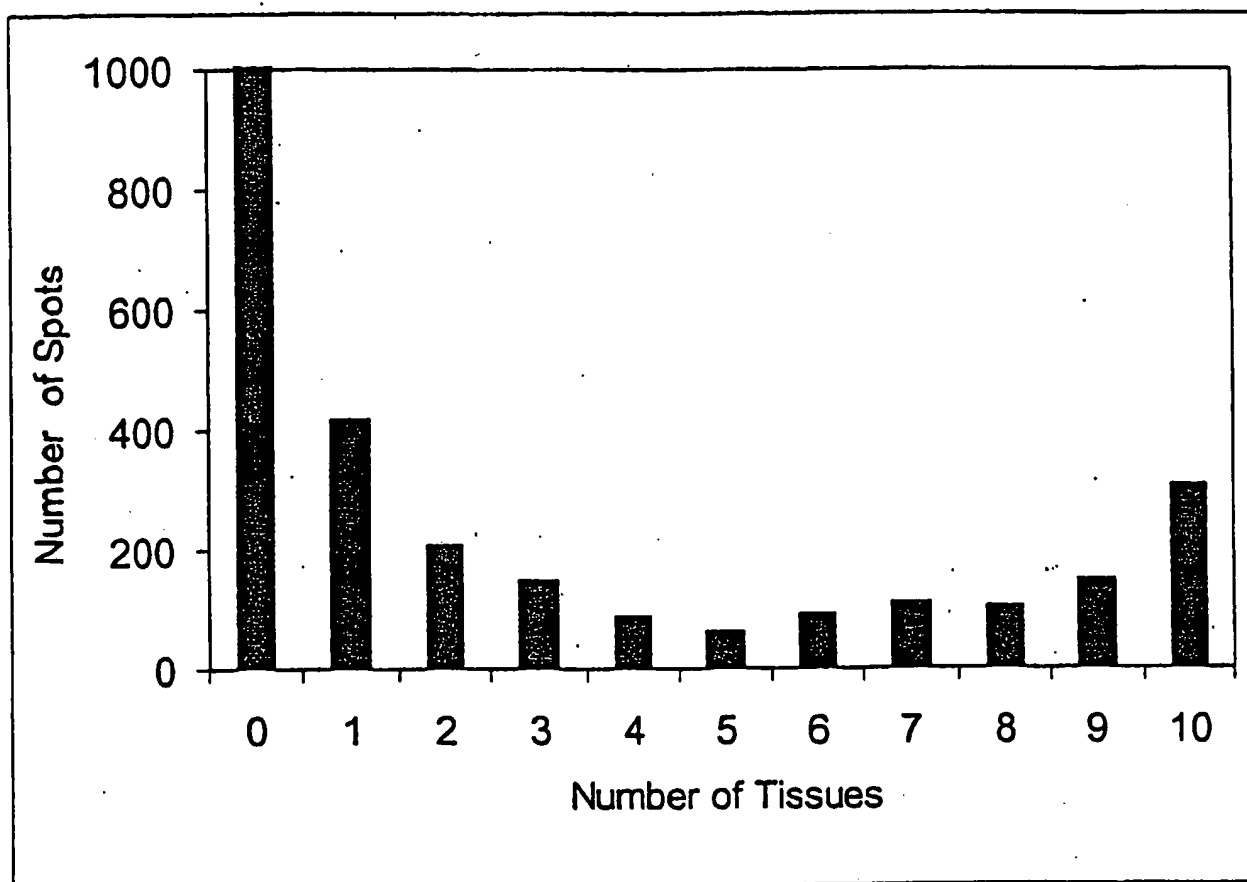


Fig. 6

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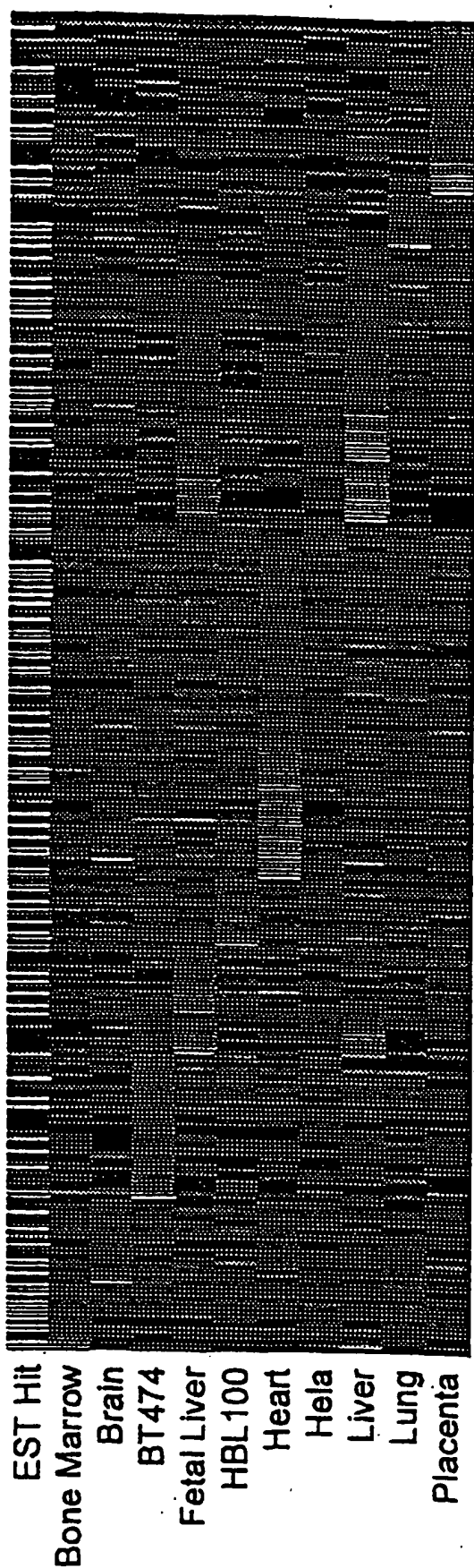


Fig. 7a

ratio legend

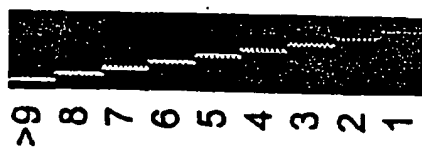


Fig. 7b

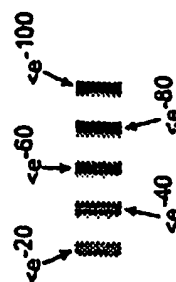


Fig. 7c

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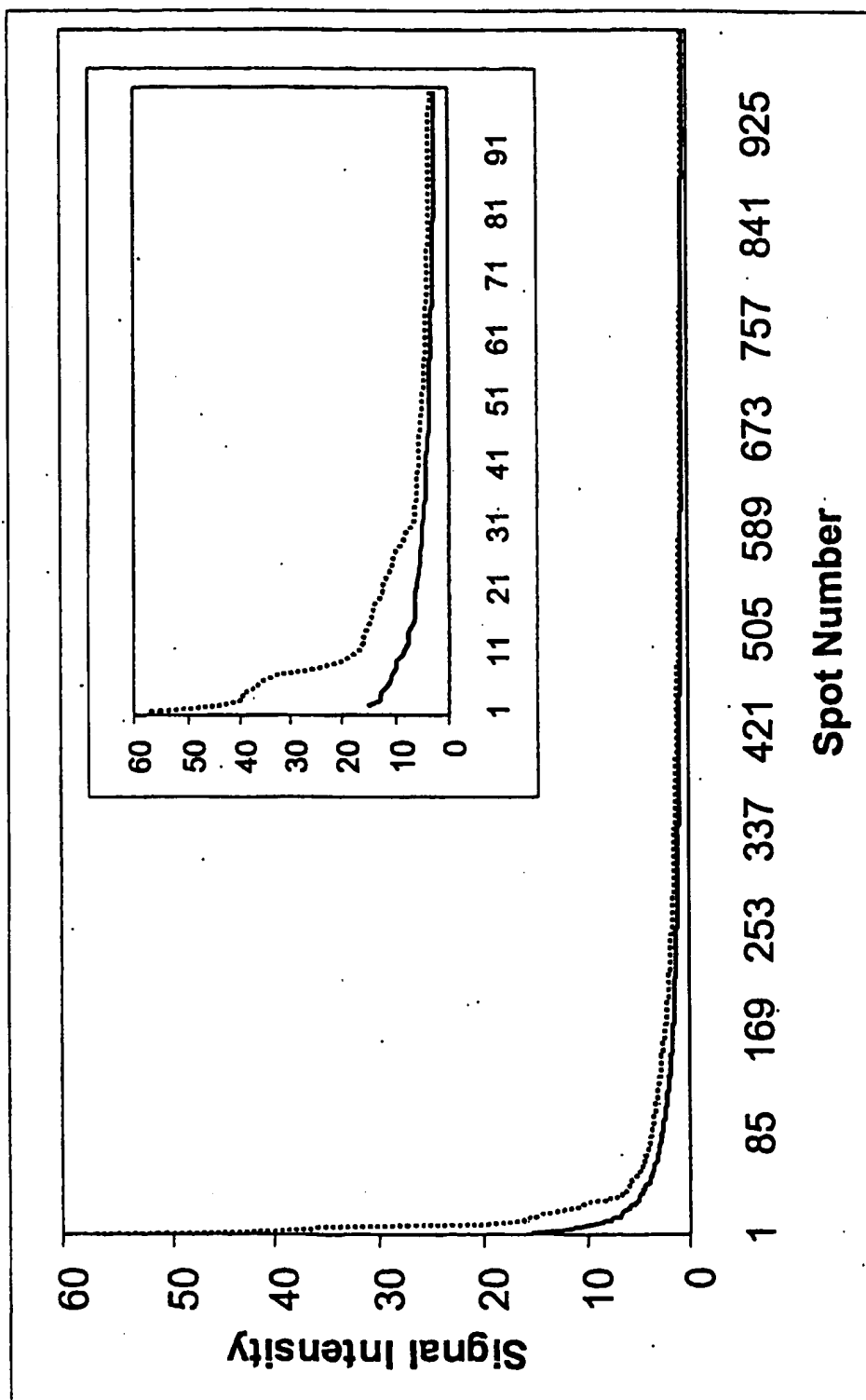


Fig. 8

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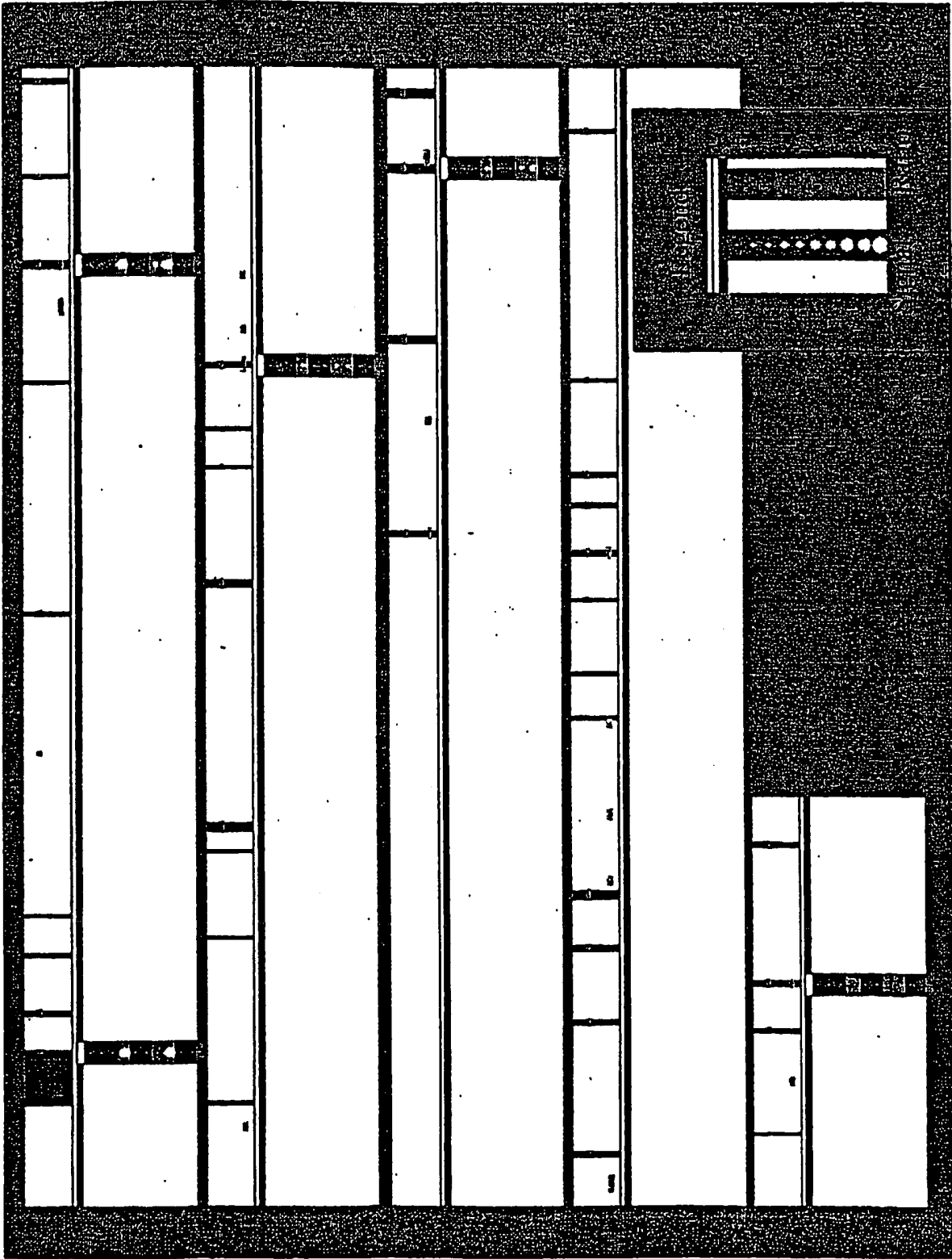
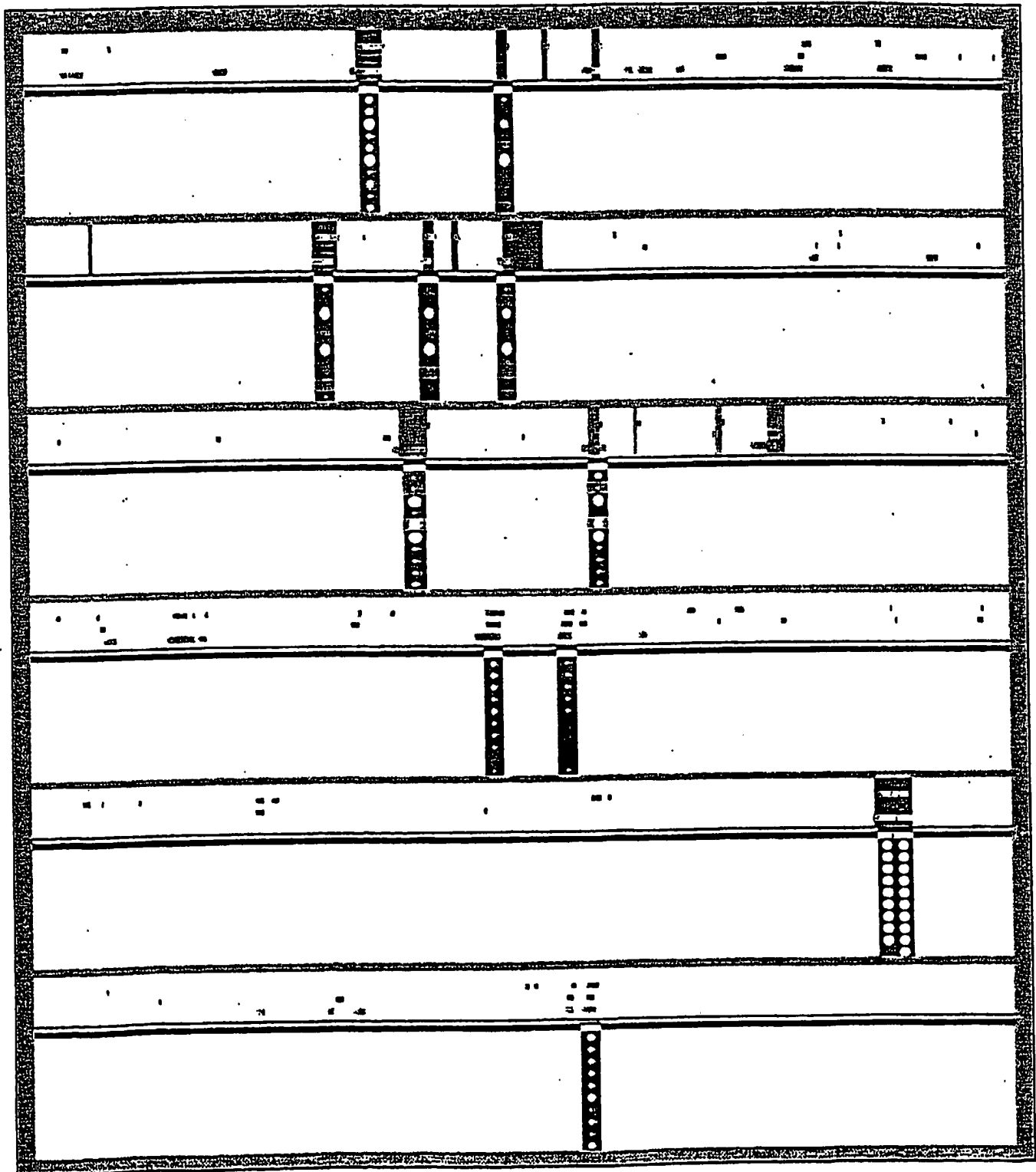


Fig. 9

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Fig. 10



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